

Municipal Separate Storm Sewer System (MS4) **Program Plan**

City of Chesapeake

May 2006





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1.0 Introduction

1.1 Background

The City of Chesapeake, Virginia first obtained a permit to discharge stormwater from its municipal separate storm sewer system (MS4) in 1996, under Phase I of the National Stormwater Program, administered in Virginia at that time by the Department of Environmental Quality (DEQ). DEQ re-issued Chesapeake's permit in 2001. In October 2005, Chesapeake submitted a re-application for its MS4 permit. Chesapeake was one of six communities (including Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach) that were the first to apply for MS4 coverage since permitting authority moved from DEQ to the Department of Conservation and Recreation (DCR). This MS4 Plan has been prepared in support of the permit re-application.

The City has developed a stormwater management program both to comply with Federal and State regulations and to reduce the potential for pollutants reaching receiving waters through the MS4. This MS4 Program Plan (MS4 Plan) documents best management practices (BMPs) Chesapeake has implemented, and plans to implement over the upcoming five years, as part of its stormwater management program.

1.2 Purpose of MS4 Program Plan

The MS4 Program Plan (MS4 Plan) details Chesapeake's comprehensive program to manage the quality of stormwater runoff discharged from the MS4. The MS4 Plan is divided into nine chapters. Chapter one discusses the purpose of the MS4 Plan and the various components of the Plan, including the MS4 Program Annual Work Plan and the Annual Report. Chapter two provides a brief overview of the City's stormwater program. Chapters three through eight discuss the City's program, categorized into the following six minimum control measures:

- Public education and outreach
- Public involvement
- Illicit discharge detection and elimination
- Construction site runoff control
- Post-construction runoff control for development and redevelopment
- Good housekeeping and pollution prevention

Chapter nine discusses Chesapeake's monitoring program to comply with the VSMP MS4 Permit.

Chapters three through eight describe Chesapeake's stormwater management program in detail utilizing fact sheet format. Each fact sheet includes:

- Description of the BMP;
- Goal of the BMP;
- The requirement of the VSMP permit that the BMP satisfies;
- The applicable federal regulation that requires the BMP;

- Authority of the City to perform the BMP;
- Department responsible for the BMP;
- Contact person;
- SOPs and references that describe or assist with performance of the BMP;
- Description of what is reported regarding the BMP in the MS4 Annual Report;
- Schedule for performing the BMP over the permit period.

The MS4 Plan includes details regarding how Chesapeake will implement its stormwater management program. It is intended to provide specifics on the operation of the program that can be incorporated by reference into the City's MS4 discharge permit. Chesapeake will update the MS4 Plan as necessary throughout the permit period so that it remains up-to-date. Revisions will be documented in the footer of the pages revised, and summarized on the Revision sheet at the front of this document. Modifications to the MS4 Plan will be made in accordance with Section 1.6.

This MS4 Plan will remain on file in the Department of Public Works Stormwater Division and is available to the public upon request.

1.3 MS4 Program Annual Work Plan

Each year of the upcoming five year permit period, Chesapeake will prepare its MS4 Annual Work Plan. The Work Plan will contain details regarding the MS4 BMPs for the upcoming year. Some BMPs are specified in the MS4 Plan, with little change expected from year to year. However, additional BMPs may change from year to year. Examples include street sweeping schedules and locations for dry weather screening. The Annual Work Plans will specify how BMPs will be implemented in each of the five years of the permit cycle. The Work Plan will be maintained in Appendix E of this document.

The Annual Work Plan will be submitted to DCR annually at the following address:

Department of Conservation and Recreation Stormwater Permitting 203 Governor Street, Suite 206 Richmond, VA 23219

1.4 MS4 Program Annual Report

The MS4 Annual Report includes the status of the BMPs implemented as part of this MS4 Program Plan in the preceding year. The Annual Report will be prepared in accordance with the MS4 discharge permit, and should include a summary of the following:

- Summary of public education efforts
- Summary of public involvement activities
- Summary of volunteer litter removal activities
- Illicit discharges identified and associated follow-up activities
- Summary of discharges reported to DEQ
- Inspections of any industrial or high risk runoff sites

- Erosion and sediment control:
 - o Total number of plans approved
 - o Total acreage disturbed
 - o Number of inspections
 - o Number and type of enforcement actions
 - o Certification status of plan reviewers, inspectors, and program administrators
 - o Summary of training provided
- Summary of the dry weather screening program, including:
 - o Number and locations of screening points
 - o Results of sample analyses when flow was present
 - o Follow-up activities
- Summary of activities to reduce the potential of seepage from the sanitary sewer to the MS4
- Stormwater management facility inspections and maintenance
- Total number of retrofit projects
- Summary of methods to reduce pesticides, herbicides, fertilizers
- Inventory of major outfalls installed annually
- Summary of stormwater system maintenance activities

The Annual Report also includes proposed changes to the MS4 Program Plan and annual expenditures for the reporting period.

Three paper copies and one electronic copy of the MS4 Annual Report are submitted to:

Department of Conservation and Recreation Stormwater Permitting 203 Governor Street, Suite 206 Richmond, VA 23219

1.5 TMDL Implementation Plans

A draft TMDL has been developed for Milldam Creek. At this time, no final TMDLs have been approved within the City of Chesapeake. The City will work with DEQ to develop and comply with future TMDLs and implementation plans as they arise. Table 1.5-1 lists waters currently designated as impaired by DEQ within the City of Chesapeake. Chesapeake will review Table 1.5-1 on an annual basis, and revise as needed, to include new water bodies listed and changes in the status of waters listed as impaired.

1.6 Modifications to MS4 Program Plan

Modifications for the purpose of Section 1.6 cover major program changes including additions and deletions of program components. Routine changes associated with the day-to-day operations of the specific components of the MS4 Program are not subject to the requirements listed below but will be included in the MS4 Annual Report submitted to DCR.

Chesapeake may change this MS4 Program Plan as specified in its MS4 discharge permit, in accordance with the following:

- Chesapeake may add (but not subtract or replace) BMPs at any time upon written notification to DCR.
- Chesapeake may request replacement of ineffective or unfeasible BMPs with an alternate BMP from DCR. The replacement is considered effective upon notification by DCR.
- DCR may require changes to the MS4 Plan as needed to:
 - o Address impacts on receiving waters caused by discharges from the MS4, including waste load allocations established by an approved TMDL;
 - o Include more stringent requirements necessary to comply with new State or Federal statutory or regulatory requirements;
 - o Include other conditions deemed necessary by DCR to comply with State or Federal requirements.

Table 1.5-1. Impaired Waters in Chesapeake

Water Body	Reason for	Source of	TMDL
_	Classification	Impairment	Date
Albemarle Canal	Dissolved oxygen, chloride	natural, natural	2010
Deep Creek	Fish tissue - PCBs	unknown	2014
Dismal Swamp, feeder canal	pH, dissolved oxygen, fish tissue - mercury	natural, natural, unknown	2010
Elizabeth River	EPA overlisting, benthic	unknown, unknown	2010
Elizabeth River, Eastern Branch (lower)	Fecal coliform, tributyltin, fish tissue - PCBs	unknown, commercial port activities, unknown	2010
Elizabeth River, Southern Branch	Tributyltin	commercial port activities	2010
Elizabeth River, Southern Branch	Fecal coliform	unknown	2014
Elizabeth River, Southern Branch	Dissolved oxygen	unknown	2016
Elizabeth River, Southern Branch at Paradise Creek	Dissolved oxygen	unknown	2016
Elizabeth River, Western Branch	Fish tissue - PCBs	unknown	2014
Elizabeth River, Western Branch (upper)	Fecal coliforms and enterococci	unknown	2016
Indian Creek	Dissolved oxygen, fecal coliform, e. coli	unknown, unknown	2010
Indian River	Fecal coliform	unknown	2014
North Landing River	Chloride	natural	2016
Northwest River (upper & middle)	Dissolved oxygen	unknown	2010
Northwest River (lower) unnamed tributary	Dissolved oxygen	unknown	2014
Pocaty River	Dissolved oxygen	unknown	2014
St. Julian Creek	Fish tissue - PCBs	unknown	2016

2.0 Program Overview

2.1 Organizational Structure

The City of Chesapeake is located in the Tidewater Region of Virginia. It is bounded on the north by the Cities of Norfolk and Portsmouth, on the east by the City of Virginia Beach, on the west by the City of Suffolk, and on the south by the State of North Carolina. Chesapeake was formed in 1963 by the merger of the City of South Norfolk with Norfolk County. The City has an area of 353 square miles.

Chesapeake is characterized by moderate to heavy residential and commercial development in the north portion of the city with heavy industrial development generally limited to areas along the Elizabeth River or in planned industrial parks. With the exception of moderate development in the Great Bridge area and along the Cedar Road corridor, the majority of the southern portion of the City is made up of agricultural or undeveloped lands. Nearly one quarter of the City is located in the Great Dismal Swamp Wildlife Refuge.

The northern and western sections of the City drain to the Elizabeth River and its tributaries, while the southern and eastern areas drain to the Chowan/Dismal Swamp Basin via the Northwest River, the North Landing River, and their tributaries. Figure 2.1-1 shows the City, surrounding areas, and major watersheds.

The City of Chesapeake owns or maintains all stormwater systems that convey runoff from City facilities. The City does not maintain interstate or private drainage ditches or structures.

The City of Chesapeake's municipal separate storm sewer system (MS4) program is a comprehensive program that identifies structural and nonstructural control measures to reduce the discharge of pollutants to the maximum extent practicable (MEP). The most cost-effective approach to achieving the MEP level of control for the City of Chesapeake is to build upon existing City programs, including comprehensive plans, ordinances, maintenance programs, and public education programs, and enhance and supplement these programs, where necessary, over the course of the 5-year MS4 permit term. The Department of Public Works oversees the stormwater management program, with assistance from the Planning Department, the Fire Department, the Department of Parks and Recreation, Department of Neighborhood Services, Department of General Services, and the Department of Public Utilities. Figure 2.1-2 provides a general overview of the City's MS4 program.

The Department of Public Works is responsible for the administration of the MS4 permit, including the preparation of revisions to this document, preparation of Annual Work Plans, preparation of Annual Reports, regional stormwater coordination, erosion and sediment control program, BMP inspections, stormwater system maintenance, street sweeping, salt storage, inspections of City yards, stormwater pollution prevention training, oil-water separator maintenance, stormwater system maintenance, and stormwater-related capital project oversight.

2.2 Financial and Staff Resources

Chesapeake provides adequate finances, to the maximum extent practicable and subject to annual appropriations, to support the MS4 program. The Stormwater Management Program is funded by a Stormwater Utility Fee paid by all developed properties in the City. Commercial and industrial facilities are charged based on their site's impervious area. These properties can receive some amount of credit if they meet certain water quality and quantity criteria through the use of Best Management Practices (BMPs). Residential properties are billed a flat rate based on an average equivalent residential unit (ERU). On average, the stormwater utility generates approximately \$4.5 million annually for the MS4 program. The approved operating budget for fiscal year 2005-2006 was \$4.85 million for Public Works drainage and stormwater management operations.

Chesapeake employs adequate staff to administer the MS4 program.

2.3 Legal Authority

The City of Chesapeake has developed its MS4 program in accordance with Virginia Stormwater Management Law, Virginia Stormwater Management Regulations, and past and present MS4 permits. It has incorporated water quality measures into various chapters of the Chesapeake City Code, including:

- Chapter 26, Article III: Erosion and Sediment Control and Tree Protection Ordinance,
- Chapter 26, Article VIII: Stormwater Management Ordinance, and
- Chapter 26, Article X: Chesapeake Bay Preservation Area District Ordinance

The authority for the MS4 program BMPs discussed in Sections 3 through 8 is included in each fact sheet.

2.4 Regional Program

2.4.1 Background

The HRPDC Regional Stormwater Management Committee (RSMC) established a formal regional program at the HRPDC in July 1996. The program initially focused on activities supporting permit compliance efforts of the six communities with Phase I VPDES Stormwater System Permits, providing technical assistance to the region's non-permitted communities, and providing regional education and training to support all of the communities. Several aspects of the program were incorporated into the second term of the Phase I MS4 Permits, issued in 2001. During FY 2001-2002, HRPDC developed a regionally consistent stormwater management program in cooperation with the localities that are covered under Phase II of the Permit Program.

During FY 1997 - 1998, the RSMC agreed that the bulk of the program's financial resources should be devoted to public information and education, including training, with the remainder of the financial resources allocated equally to legislative and regulatory issues; regional studies; and technical assistance. As the program has evolved, the basic annual funding level for the cooperative regional program has increased, and the allocation of funds among program

elements has changed slightly with technical studies and assistance commanding a larger share of the program.

To support development and operation of the stormwater education program, a Public Information and Education Subcommittee, consisting of local stormwater education/public information staff, was established in 1997. The regional stormwater education program is known as HR STORM. Program funding supports, in part, two HRPDC staff members, who also coordinate the region's water conservation education program (HR WET), the regional litter control and recycling education program (HR CLEAN), the regional wastewater (fats, oil and grease) educational program (HR FOG), as well as other regional environmental education, public information and training programs. The HRPDC staff facilitates a number of cooperative ventures among these programs, which serve to enhance the effectiveness of all of them. The local financial commitment also enables the HRPDC to support technical and policy staff to pursue the various technical and policy initiatives involved in the Regional Stormwater Management Program.

HRPDC staff and the RSMC have developed a Memorandum of Agreement (MOA), formalizing the existing regional program, while providing a structure for future program evolution and regional cooperation. The MOA outlines the basic regulatory and programmatic premises for the cooperative program, incorporating the Regional Program Goals, provided later in this section. It establishes a division of program responsibilities among the HRPDC and the participating localities and establishes the role and responsibilities of the Regional Stormwater Management Committee. It formalizes the traditional method of allocating program costs, addresses questions of legal liability for program implementation and includes other general provisions.

In January 2003, the Hampton Roads Planning District Commission approved the Memorandum of Agreement Establishing the Hampton Roads Regional Stormwater Management Program and referred the MOA to the sixteen participating cities and counties for consideration. Fifteen cities and counties, including the twelve localities with Phase I and II MS4 Permits, have executed the MOA.

2.4.2 Program Goals

The HRPDC and the Regional Stormwater Management Committee adopted the following program goals in September 1999, and reaffirmed them in the January 2003 approval of the "Memorandum of Agreement Establishing the Hampton Roads Regional Stormwater Management Program:"

- Manage stormwater quantity and quality to the maximum extent practicable (MEP)
 - o Implement BMPs and retrofit flood control projects to provide water quality benefits.
 - o Support site planning and plan review activities.
 - o Manage pesticide, herbicide and fertilizer applications.

- Implement public information activities to increase citizen awareness and support for the program.
- Meet the following needs of citizens:
 - o Address flooding and drainage problems.
 - o Maintain the stormwater infrastructure.
 - o Protect waterways.
 - o Provide the appropriate funding for the program.
- Implement cost-effective and flexible program components.
- Satisfy VPDES stormwater permit requirements:
 - o Enhance erosion and sedimentation control.
 - o Manage illicit discharges, spill response, and remediation.

2.4.3 Program Components

To support the program goals, the components of the Regional Stormwater Management Program are:

Public Education and Training. The Public Information/Education and Training components of the regional program constitute a major element of the Phase I program, based on the allocation of financial resources. The HRPDC employs two professional staff persons to develop and conduct this element of the program as well as related educational initiatives. The Public Information and Education Subcommittee (HR STORM) was established during FY 1997 - 1998 and meets on a monthly basis. The HR STORM Program and its accomplishments for the year are summarized in program reports, published annually.

HRPDC staff, in conjunction with the six Hampton Roads Phase II communities, has worked to develop and conduct training programs for local government staff. Those programs, open to both Phase I and Phase II municipalities, were designed to assist the localities in meeting the Good Housekeeping Management Measure. Program topics have included pollution prevention, landscaping, and fleet maintenance.

Legislative/Regulatory Monitoring. This element of the program involves monitoring of state and federal legislative and regulatory activities that may impact local stormwater management programs. Based on this monitoring activity, the HRPDC staff develops briefing materials for use by the localities, including consideration by the governing bodies. As appropriate, the HRPDC staff, in cooperation with the Committee, develops consensus positions for consideration by the Commission and local governments. The level of effort devoted to this element has increased significantly over the past three years focusing during FY 2002 - 2003 on the development of the Virginia Regulations for the Phase II Program, revisions to the General Permits for Industrial and Construction Activities, and various legislative studies of the state's stormwater management programs. Since 2003, major initiatives have involved state legislation

integrating the state's stormwater management programs into one agency; state funding for natural resource programs; restructuring the permit fee programs of the Department of Environmental Quality; the evolving state stormwater management program of the Department of Conservation and Recreation; state funding for water quality improvements; and several new state water quality regulations.

Regional Studies. Through this element, the HRPDC staff is charged with undertaking appropriate regional studies to support local stormwater management programs. This includes coordinating and managing consultant efforts. Over the last several years, a number of technical studies have been completed through the regional program. They include:

- Regional Stormwater Loading Study: Proposed Regional Monitoring Program and Program Effectiveness Indicators, September 1999.
- Stormwater Program Effectiveness Indicators: Indicator Tool, 2000.
- Review of Phase II MS4 Permit Regulations, 2000.
- Analysis of Water Quality Monitoring Data: MS4 Permits Years 1 5, 2001.
- Regional Indicators of Stormwater Management Program Effectiveness. (4 reports, various dates).
- Indicators of Stormwater Management Program Effectiveness for the six individual localities, annually.
- Phase II Permit Annual Reports (6 reports), 2004 and 2005.
- Development of Reapplications for Phase I Permits, 2005.

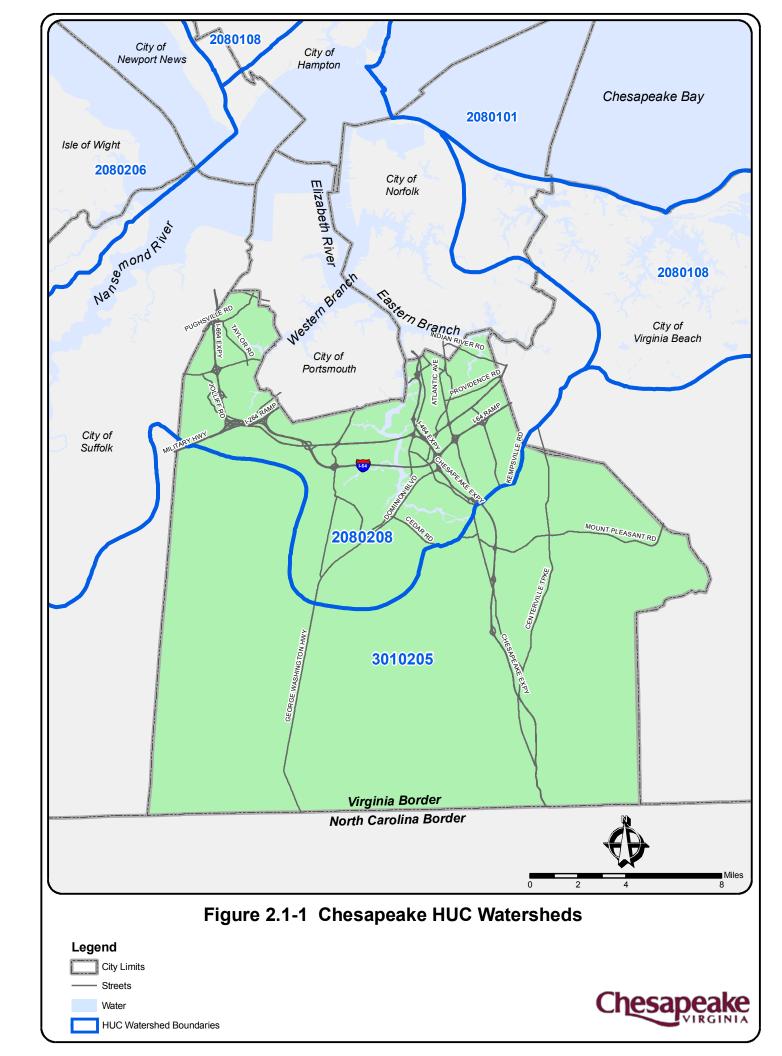
Technical Assistance. The HRPDC serves as a clearinghouse for technical assistance to the localities, as well as a point of contact in arranging short-term assistance from one locality to another. Recent technical assistance has included developing recommendations for establishment of a stormwater utility, assistance with evaluating public information and education options, and assistance with joint EPA and DCR audits of city stormwater management programs. The HRPDC also acted as a forum to allow DCR stormwater program managers/regulators to meet with the localities to discuss requirements of HB1177. Comprehensive technical data and information is maintained in the HRPDC library for use by the participating localities as well as the public. In addition, the HRPDC staff provides technical information and advice to all of the participating localities on a wide variety of issues upon request. Finally, the HRPDC is frequently requested by localities from other parts of Virginia and adjacent states for assistance due to its experience with stormwater management programs in Hampton Roads.

2.4.4 Phase I Monitoring Program

During the first MS4 permit term, the six Hampton Roads local governments, including the City of Chesapeake, were required to monitor chemical constituents from five selected outfalls. The Phase I communities were required to calculate event mean concentrations (EMCs) of pollutants discharged from their stormwater outfalls based on the monitoring data collected. When compared to EMCs from other urban areas studied during the Nationwide Urban Runoff Program, these calculations indicated that the level of pollutants carried by stormwater in Hampton Roads is at least typical of other urban areas and, in many cases, better.

While the chemical monitoring program was useful in determining that the stormwater runoff in Hampton Roads is comparable to other urban areas, it was not found to be useful in determining the effectiveness of Chesapeake's stormwater management program. The high variability of the data, due to natural factors such as rainfall, makes it very difficult to detect increases or decreases in pollutant levels carried by stormwater runoff. Therefore, Chesapeake, and the other five Hampton Roads Phase I communities, proposed modifying the MS4 permit to replace the chemical monitoring requirement with a Stormwater Management Program Effectiveness Indicator Tracking Program for the second permit term. The Virginia Department of Environmental Quality, who administered the MS4 permit program at that time, accepted the proposed tracking program in lieu of chemical monitoring and modified the six MS4 permits accordingly when they were reissued in spring 2001.

In the federal Phase II Stormwater Regulations, the U.S. Environmental Protection Agency recognizes the shortcomings of chemical monitoring. Rather than conduct a chemical monitoring program, Phase II communities are required to track the implementation of stormwater management measures. The Stormwater Management Program Effectiveness Indicator Tracking Program is similar to the tracking system required by the Phase II Stormwater Regulations. The Effectiveness Indicators tracked by the Hampton Roads Phase I municipalities over the most recent permit period include pollutant loads, acreage of greenlands, erosion and sediment control activities, stormwater BMP implementation, flooding and drainage management, operations and maintenance activities, illicit discharge detection activities, and public education activities. Since 2001, the HRPDC staff has prepared the individual Effectiveness Indicators' reports for the six Phase I localities, as well as a comprehensive regional summary of those reports, on an annual basis.



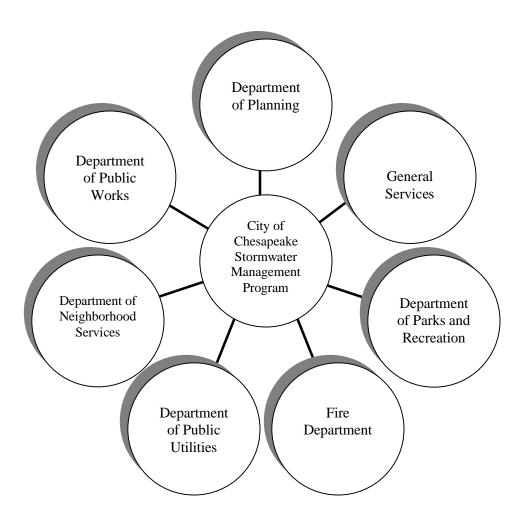


Figure 2.1-2-City of Chesapeake Stormwater Management Program Organizational Chart

BMP 3.1.1 HR STORM

General Description: The City of Chesapeake participates in HR STORM, a regional stormwater

education initiative coordinated by the Hampton Roads Planning District

Commission (HRPDC)

BMP Goals and Objectives:

Chesapeake participates in HR STORM to provide stormwater-related education to its residents, businesses, and industry, with the goal of reducing

pollutant discharge to the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: This BMP also addresses BMPs 3.3.1. 3.4.1, and 3.5.1.

Authority: HR STORM operates under the auspices of the Hampton Roads Planning

District Commission, created by the region's sixteen local governments, pursuant to Section 15.2-4200, *et seq.* of the Code of Virginia, 1950, as amended. The Regional Stormwater Management Committee, including HR STORM, operates pursuant to a Memorandum of Agreement among the HRPDC and the sixteen localities. HR STORM has established administrative procedures. Operations are subject to annual appropriations from the region's

local governments, including the City of Chesapeake.

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A), which requires a description of source control measures to reduce pollutants from runoff from commercial and residential areas.

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides, and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(5), which requires "A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(4), which requires "A description of appropriate educational and training measures for construction site operators."

Roles and Responsibilities:

HR STORM is a subcommittee of the HRPDC Regional Stormwater Management Committee. The City of Chesapeake Public Works Information Specialist participates on the HR STORM subcommittee.

Contact Information:

Questions regarding the HR STORM subcommittee can be directed to:

HRPDC

Senior Planner, Environmental Education

(757) 420-8300

Questions regarding Chesapeake's involvement with HR STORM can be directed to:

Public Works Information Specialist (757) 382-6983

Policies and Procedures:

HR STORM provides regional stormwater education via radio, cable television, local television, publications, an automated information telephone service (58-STORM), and a website (www.hrstorm.org). HR STORM focuses on several main issues regarding stormwater pollution prevention each year. Recent topics have included:

- Pet waste.
- Household chemical disposal,
- BMP maintenance,
- Landscaping for waterways, and
- Proper use and disposal of automotive chemicals.

HR STORM, in conjunction with HR CLEAN and HR WET, also provides mini-grants for environmental projects in area schools.

During the permit period, HR STORM will develop an educational brochure regarding illicit discharges that is targeted to industrial facilities. Chesapeake will distribute the brochure to industries within the City. HR STORM's website will continue to provide information targeting businesses and industry, including topics such as pollution prevention.

During the permit period, HR STORM will also work with the Department of Conservation and Recreation to develop erosion and sediment control educational materials targeted at site contractors. The committee will then work with professional and/or trade organizations to provide the information developed to site contractors.

The attached table includes activities proposed by HR STORM over the fiveyear cycle of the current VPDES MS4 permit.

SOPs: Not applicable.

Available Resources and References:

Table 3.1.1-1: Proposed HR STORM Regional Initiatives. The HR STORM website includes recently aired television and radio spots, educational information, and annual and quarterly reports.

Available resources for the educational materials targeted to contractors include the following:

- Virginia Erosion and Sediment Control Handbook (DCR) (available at http://www.dcr.virginia.gov/sw/e&s.htm#handbook)
- Virginia Erosion and Sediment Control program overview (available at http://www.dcr.virginia.gov/sw/e&s.htm#overview)
- DCR's list of regulated activities (available at http://www.dcr.virginia.gov/sw/e&s.htm#regulated)
- 19 Minimum Standards for Erosion and Sediment Control (available at http://www.dcr.virginia.gov/sw/docs/MSPamphlet.PDF)
- Information regarding state certification and training (available at http://www.dcr.virginia.gov/sw/estr&crt.htm)

Recordkeeping and Reporting:

The MS4 Annual Report submitted by the City of Chesapeake will include a copy of the HR STORM Annual Report. The HR STORM Annual Report will include information such as a description of radio and television spots aired, the stations on which spots were aired, the number of calls to the infoline, examples of publications produced, and a summary of projects that received mini-grants.

The HR STORM annual report will also contain a description of any educational programs developed targeting industries, contractors, or other audiences during the applicable year. Chesapeake will include a description of measures the City implements independently to distribute materials developed.

Schedule of Activities:

Activity	Schedule
Chesapeake will continue participation in HR STORM.	Years 1 through 5
Public education will remain on HR STORM website.	Years 1 through 5
HR STORM will develop an educational program	Year 3
targeting erosion and sediment control for contractors.	
Chesapeake will develop an educational program	Year 2
targeting erosion and sediment control for contractors.	
Chesapeake will participate in the distribution of E&S	Year 3-5
information to contractors.	

Table 3.1.1-1. Proposed Regional Initiatives to Address Public Education for Phase I MS4s through HR Storm

VIII 0 1/8/1 1111 5 101111			
Activity	Schedule		
Develop HR Storm Communications Plan	Year 1		
Provide pollution prevention-related training for municipal employees	Annually		
Provide education regarding proper disposal of used oil and toxic materials on	Continually		
HR Storm website			
Provide education regarding proper disposal of used oil and toxic materials on	Years 2 and 5		
radio spots			
Provide education regarding proper use of pesticides, herbicides, and fertilizers	Years 2 through 5		
on HR Storm website			
Provide brochures regarding proper use of pesticides, herbicides, and fertilizers	Annually		
Provide education regarding illicit discharges on HR Storm website	Years 3 through 5		
Work with DCR to obtain E&S educational material targeted to site contractors	Year 3		
Work with professional and/or trade organizations to provide educational	Year 4		
information to contractors			
Continue education regarding litter prevention	Annually		

BMP 3.1.2 HR CLEAN

General Description: The City of Chesapeake participates in HR CLEAN, a regional recycling and

litter prevention education program coordinated by the Hampton Roads

Planning District Commission (HRPDC).

BMP Goals and Objectives:

Chesapeake participates in HR CLEAN to provide litter prevention and recycling education to its residents, with the goal of reducing the discharge of

floatables and debris from the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: HR CLEAN operates under the auspices of the Hampton Roads Planning

District Commission, created by the region's sixteen local governments, pursuant to Section 15.2-4200, *et seq.* of the Code of Virginia, 1950, as amended. HR CLEAN was established formally by the HRPDC at its Quarterly Commission Meeting of April 19, 2000. It operates through HR CLEAN, an informal coalition of the region's localities, which has established administrative procedures. Operations are subject to annual appropriations from the region's local governments, including the City of Chesapeake.

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A), which requires a description of source control measures to reduce pollutants from

runoff from commercial and residential areas.

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management

and disposal of used oil and toxic materials."

Roles and Responsibilities: HR CLEAN is a committee of the HRPDC addressing environmental issues in Hampton Roads. The City of Chesapeake Environmental Improvement

Council Special Programs Coordinator participates on the HR CLEAN

committee.

Contact Information: Questions regarding the HR CLEAN subcommittee can be directed to:

HRPDC

Senior Planner, Environmental Education

(757) 420-8300

Questions regarding Chesapeake's involvement with HR CLEAN can be directed to:

Chesapeake Environmental Improvement Council Special Programs Coordinator (757) 382-6411

Policies and Procedures:

HR CLEAN provides regional litter prevention and recycling education via radio spots, television spots, school education programs, and a website (www.hrclean.org). Recent HR CLEAN topics have included:

- Litter prevention,
- Cigarette waste,
- Mulch mowing,
- Recycling (including rechargeable and automotive batteries),
- Household hazardous waste, and
- Litter prevention laws in Virginia.

HR CLEAN, in conjunction with HR STORM and HR WET, also provides mini-grants for environmental projects in area schools.

SOPs: Not applicable.

Available Resources and References:

The HR CLEAN website includes recently aired television spots, educational information, and a copy of the most recent annual report.

Recordkeeping and Reporting:

The MS4 Annual Reports submitted by the City of Chesapeake will reference the HR CLEAN Annual Report. The HR CLEAN Annual Report, available at the HR CLEAN website and on file in the Department of Public Works will include information on the previous year's activities, such as a description of radio and television spots aired, the stations on which spots were aired, programs for students, and a summary of projects that received mini-grants.

Schedule of Activities:

Chesapeake will continue to participate in HR CLEAN throughout the permit period.

BMP 3.1.3 HR WET

General Description: The City of Chesapeake participates in the Hampton Roads Water Efficiency

Team (HR WET), a regional program to promote efficient water use coordinated by the Hampton Roads Planning District Commission.

BMP Goals and Objectives:

Chesapeake participates in HR WET to provide water conservation education

to its residents.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: HR WET operates under the auspices of the Hampton Roads Planning District

Commission, created by the region's sixteen local governments, pursuant to Section 15.2-4200, *et seq.* of the Code of Virginia, 1950, as amended. HR WET was established through the HRPDC Directors of Utilities Committee in February 1994 and incorporated in the Regional Water Program and HRPDC

Annual Work Program in March 1994. HR WET has established

administrative procedures. Operations are subject to annual appropriations from the region's local governments, including the City of Chesapeake.

Applicable Federal Regulation:

Not applicable.

Roles and Responsibilities: HR WET is a subcommittee of the HRPDC Directors of Utilities Committee. The City of Chesapeake Department of Public Utilities participates on the HR

WET subcommittee.

Contact Information: Questions regarding the HR WET subcommittee can be directed to:

HRPDC

Senior Planner, Environmental Education

(757) 420-8300

Questions regarding Chesapeake's involvement with HR WET can be directed

to:

Department of Public Utilities Administrative Assistant

(757) 382-6356

Policies and Procedures:

The mission of HR WET is to develop and implement a regional approach to promoting efficient water use throughout Hampton Roads. The HR WET

program has established the following goals:

• Raise public awareness of the region's water supplies and the need to

BMP 3.1.3, HR WET Revision 0, May 2006 Page 3.1.3-1 use them efficiently with the objective of changing habits, not lifestyles, regarding water use.

 Reduce per capita water consumption by increasing the number of people using water more wisely.

To achieve these goals, HR WET conducts a comprehensive educational program involving media relations, advertising, demonstrations at festivals and exhibits, and public speaking for civic groups. Other programs include a video, brochures, research on the effectiveness of water-saving kits, a clearinghouse for exchanging information on water-wise practices, and past recognition of water-efficient businesses and industries. Information regarding HR WET is available on the internet at http://www.hrwet.org/index.shtml. Not applicable.

SOPs:

Available Resources and References:

The HR WET website is available at http://www.hrwet.org/index.shtml.

Recordkeeping and Reporting:

HRPDC staff will prepare each year's HR WET Annual Report, available on the internet at http://www.hrwet.org/index.shtml. The HR WET Annual Report will include information on the previous year's activities, such as a description of radio and television spots aired, the stations on which spots were aired, programs for students, and a summary of projects that received mini-grants.

Schedule of Activities:

Chesapeake will continue to participate in HR WET throughout the permit period.

BMP 3.1.4 HR FOG

General Description: The City of Chesapeake participates in HR FOG, a regional public information

and education program regarding the proper disposal of fat, oil and grease (FOG) coordinated by the Hampton Roads Planning District Commission

(HRPDC).

BMP Goals and Objectives:

Chesapeake participates in HR FOG to provide fat, oil and grease disposal education to its residents and businesses in order to minimize grease blockages in the sanitary sewer collection system, which could potentially result in

sanitary sewer overflows (SSOs) to the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: HR FOG operates under the auspices of the Hampton Roads Planning District

Commission, created by the region's sixteen local governments, pursuant to Section 15.2-4200, *et seq.* of the Code of Virginia, 1950, as amended. HR FOG was established through the HRPDC Directors of Utilities Committee in 2005 and incorporated in the Regional Wastewater Program and HRPDC Annual Work Program in March 2005. Operations are subject to annual appropriations from the region's local governments, including the City of

Chesapeake.

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(7), which requires "A description of controls to limit infiltration of seepage from

municipal sanitary sewers to municipal separate storm sewers where

necessary."

Roles and Responsibilities: HR FOG is a subcommittee of the HRPDC Directors of Utilities Committee. The City of Chesapeake Director – Department of Public Utilities participates

on the HR FOG subcommittee.

Contact Information: Questions regarding the HR FOG subcommittee can be directed to:

HRPDC

Senior Planner, Environmental Education

(757) 420-8300

Questions regarding Chesapeake's involvement with HR FOG can be directed

to:

Director – Department of Public Utilities

(757) 382-6390

or

Department of Public Utilities Maintenance and Operations (757) 382-3402

Policies and Procedures:

The mission of HR FOG is to develop and implement a regional approach to promoting proper disposal of fat, oil, and grease. Regionally, over 75% of pipe blockages are reportedly caused by grease buildup, and pipe blockages are suspected to cause over 90% of sanitary sewer overflows in Hampton Roads. SSOs not only cause significant environmental and health impacts, but are also expensive to repair. Since this is a problem region-wide, it made sense to begin to approach it collaboratively. A small subcommittee has been formed under the Hampton Roads Planning District to begin the initial phases of a regional FOG education effort.

HR FOG has evaluated SSO data and completed focus groups with area restaurants and surveys of residents to better understand practices and knowledge related to fat, oil, and grease disposal. The results of the survey indicated that education of both residents and restaurant managers and staff is needed to improve disposal practices.

Not applicable.

SOPs:

Available Resources and References:

During the permit cycle, HR FOG will develop educational programs that target both residents and restaurant workers to improve knowledge and understanding of proper disposal methods for FOG.

Recordkeeping and Reporting:

HRPDC staff will prepare reports documenting HR FOG's activities. Those reports will be kept on file at HRPDC and the City and referenced in the City's MS4 Annual Report.

Schedule of Activities:

Activity	Schedule
Participate in HR FOG.	Years 1 through 5
HR FOG will continue development of educational	Years 1 through 2
programs.	
HR FOG will begin implementation of educational	not later than
programs.	Year 3

BMP 3.1.5 Used Oil and Toxic Materials Disposal Brochures

General Description: Chesapeake is a member of the Southeastern Public Service Authority (SPSA),

who distributes brochures promoting its household chemical waste disposal and

used oil recycling programs.

BMP Goals and

Objectives:

The goal of this BMP is to make Chesapeake residents aware of the appropriate

methods for disposal of used oil and household hazardous wastes.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and

disposal of used oil and toxic materials."

Roles and

Responsibilities:

SPSA is responsible for operating and promoting the disposal sites within the

City of Chesapeake.

Contact Information: Questions related to SPSAs programs should be directed to:

SPSA

(757) 424-4297

Policies and **Procedures:** SPSA operates a household chemical and waste disposal program. Household hazardous wastes are accepted through this program at no charge to private citizens. Household chemicals are accepted at eight locations in Hampton Roads. In Chesapeake, household hazardous waste is accepted at the Chesapeake Transfer Station, located at 901 Hollowell Lane. SPSA distributes brochures describing this program, the waste acceptance locations, and the hours of operation.

SPSA also accepts used oil at the Chesapeake Transfer Station for recycling. A second SPSA brochure publicizes the used oil recycling program.

SOPs: Not applicable.

Available Resources and References:

"Household Hazardous Waste" (SPSA brochure)

"Used Oil Recycling" (SPSA brochure)

Recordkeeping and Reporting:

SPSA records approximate numbers of residents who participate in the program. The Department of Public Works Division of Waste Management will obtain any available numbers from SPSA and report them in the MS4 Annual Report.

Schedule of Activities:

Chesapeake will continue to participate in SPSA throughout the permit period. The Department of Public Works Division of Waste Management will obtain any available information regarding the number of residents who utilize SPSA's household hazardous waste program from SPSA and report those numbers in the MS4 Annual Report.

BMP 3.1.6 Pesticide, Herbicide, Fertilizer Brochures

General Description: Chesapeake provides education to homeowners by distributing a brochure

entitled "Stormwater - Nonpoint Source Pollution and Stormwater

Management."

BMP Goals and

Objectives:

The goal of this BMP is to make Chesapeake residents aware of the appropriate methods for applying pesticides, herbicides, and fertilizers in order to reduce

the discharge of pollutants to the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 3.1.1, HR STORM, also addresses public education regarding the proper

use of pesticides, herbicides, and fertilizers.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent possible, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures of commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities".

Roles and Responsibilities: The Department of Public Works Division of Stormwater Management is responsible for the content of the "Stormwater - Nonpoint Source Pollution and Stormwater Management" brochure.

Contact Information:

Questions related to pesticides, herbicides, and fertilizers should be directed to:

Stormwater Administrator

(757) 382-3321

Policies and Procedures:

The Department of Public Works Division of Stormwater Management distributes the city brochures at special events and gives them to known

violators. The website also includes a copy of the brochure at:

http://cityofchesapeake.net/services/depart/pub-

wrks/pdffiles/stormwaterbrochure.pdf

SOPs: Not applicable.

Available Resources and References:

"Stormwater - Nonpoint Source Pollution and Stormwater Management"

brochure.

Recordkeeping and Reporting:

The Department of Public Works Division of Stormwater Management will continue to distribute the city brochures out at special events and to known

BMP 3.1.6, Pesticide, Herbicide, Fertilizer Brochures

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City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

violators, and to report the number of brochures printed each year in the MS4 Annual Report.

Schedule of Activities:

Activity	Schedule
Distribute city brochures	Years 1 through 5

BMP 3.1.7 Illicit Discharges Brochures

General Description: Chesapeake provides education to homeowners by distributing a brochure

entitled "Stormwater - Nonpoint Source Pollution and Stormwater

Management".

BMP Goals and

Objectives:

The goal of this BMP is to make Chesapeake residents aware typical nonpoint

source pollutants in order to reduce their discharge into the MS4.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: BMP 3.1.1, HR STORM, also addresses public education regarding illicit

discharges.

Chesapeake City Code Chapter 26 Article VIII - Stormwater Management **Authority:**

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(5), which requires "A description of a program to promote, publicize, and facilitate public

reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers".

Roles and

Responsibilities:

The Department of Public Works Division of Stormwater Management is

responsible for the content of the "Stormwater - Nonpoint Source Pollution and

Stormwater Management" brochure.

Contact Information: Questions related to pesticides, herbicides, and fertilizers should be directed to:

Stormwater Administrator

(757) 382-3321

Policies and **Procedures:** The Department of Public Works Division of Stormwater Management distributes the city brochures at special events and gives them to known

violators. The website also includes a copy of the brochure at:

http://cityofchesapeake.net/services/depart/pub-

wrks/pdffiles/stormwaterbrochure.pdf

SOPs: Not applicable.

Available Resources and References:

"Stormwater - Nonpoint Source Pollution and Stormwater Management"

brochure.

Recordkeeping and

Reporting:

The Department of Public Works Division of Stormwater Management will continue to distribute the city brochures out at special events and to known

violators, and to report the number of brochures printed each year in the MS4

Annual Report.

City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

Schedule of Activities:

	1 / 0 8 / 0 11 / 1 / 0 11
Activity	Schedule
Distribute city brochure.	Years 1 through 5

BMP 3.1.8 Newsletter

General Description: Chesapeake Department of Public Works publishes a newsletter titled "Public

Works News" for the residents of Chesapeake

BMP Goals and Objectives:

The objective of this BMP is to educate homeowners and improve awareness regarding erosion control & stormwater management issues. It also highlights

related events and promotes involvement in improving water quality.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article III - Erosion and Sediment Control,

Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent possible, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures of commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities".

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(5), which requires "A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

Roles and Responsibilities: Chesapeake Department of Public Works is responsible for distributing the newsletter within the City of Chesapeake. The newsletter is also available

online at: http://cityofchesapeake.net/services/depart/pub-

wrks/newsletters.shtml

Contact Information: Questions related to the Newsletter should be directed to:

Public Works Information Specialist

(757) 382-6983

Policies and Procedures:

The Division of Stormwater Management implements targeted mailings to special interest groups, civic leagues, HOAs, POAs, and free bins inside City buildings (libraries, recreation centers, etc.)

BMP 3.1.8, Newsletter Revision 0, May 2006 Page 3.1.8-1 **SOPs:** Not applicable.

Available Resources and References:

- General information regarding the City's stormwater education programs, including the newsletter, is included in a Stormwater Public Education Memorandum (March 7, 2006), included in Appendix C.
- "Public Works News" Newsletter.

Recordkeeping and Reporting:

Report the number of newsletters distributed annually in the MS4 Annual Report.

Schedule of Activities:

Activity	Schedule
Targeted mailings to special interest groups	Quarterly Years 1 through 5
Newsletter available online	Quarterly Years 1 through 5

Section 3.1 Homeowner Education and Outreach

BMP 3.1.9 Municipal Website

General Description: The City of Chesapeake website can be found at:

http://cityofchesapeake.net/index.html

The website provides information to educate homeowners regarding various

issues, including stormwater-related issues.

BMP Goals and Objectives:

The objective of this BMP is to inform and educate homeowners about stormwater management, pollution prevention, erosion control, and proper

waste disposal.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article III - Erosion and Sediment Control,

Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent possible, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures of commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities".

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(5), which requires "A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

Roles and Responsibilities:

Chesapeake Department of Public Works is responsible for the website.

Contact Information: Questions related to the Website should be directed to:

Public Works Information Specialist

(757) 382-6983

or

The Public Communications Webmaster

(757) 382-8419

Program Plan

Policies and The Public Communications Webmaster uploads information from the Public

Procedures: Works Information Specialist.

SOPs: Not applicable.

Available Resources The City of Chesapeake website can be found at:

and References: http://cityofchesapeake.net/index.html

Recordkeeping and

Reporting:

The number of visits to each page of the website are tracked online Chesapeake will report the number of visits to the stormwater-related pages in the MS4

Annual Report.

Schedule of Activities: The website will remain available throughout the permit period.

Section 3.1 Homeowner Education and Outreach

BMP 3.1.10 Civic Group Presentations

General Description: The City of Chesapeake gives presentations to Civic Groups concerning

erosion control and other stormwater-related issues.

BMP Goals and Objectives:

The goal of this BMP is to make Chesapeake residents aware of the importance of pollution prevention as it is related to the stormwater drainage system.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 4.4.1 discusses required public notification and public meetings.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management Chesapeake City Code Chapter 26 Article III – Erosion and Sediment Control

Applicable Federal Regulation:

Depending on presentation content, this BMP may address the following:

- CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will included, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-or-ways and at municipal facilities."
- CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(5), which requires "A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers."
- CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

Roles and Responsibilities:

Chesapeake Department of Public Works is responsible for giving presentations to Civic groups upon request.

Contact Information: Questions related to the civic group presentations should be directed to:

Public Works Information Specialist

(757) 382-6983

Policies and Procedures:

The Department of Public Works Division of Stormwater Management makes presentations to civic groups upon request. Topics vary based on the civic league's interest, but may include illicit discharges, proper landscaping

BMP 3.1.10, Civic Group Presentations Revision 0, May 2006 Page 3.1.10-1 procedures, disposal of household hazardous waste, cleaning up after pets, or

general stormwater information.

SOPs: Not applicable

Available Resources and References:

Numerous presentations are used and are tailored to the topic of discussion

requested.

Recordkeeping and Reporting:

The Department of Public Works Division of Stormwater Management will record the number of stormwater-related presentations given and the approximate number of people in attendance in the MS4 Annual Report.

Schedule of Activities:

Activity	Schedule
Presentations as requested by Civic Groups	Years 1 through 5

Section 3.2 New and Redevelopment Education and Outreach

BMP 3.2.1 Public Facilities Manual

General Description: This manual details Chesapeake's design and construction standards, as well as

technical specifications for the construction of all public facilities. The manual

can be found online at:

http://cityofchesapeake.net/services/depart/pub-wrks/engineer-

publicfacilitiesmanual.shtml.

BMP Goals and Objectives:

The goal of this BMP is to make Chesapeake residents, contractors and those involved in projects in the City of Chesapeake, aware of the design and construction standards, city standards and technical specifications for new

development and redevelopment projects.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: This BMP also addresses BMP 3.3.2, Erosion and Sediment Control Handout

for Contractors, BMP 3.3.3, Erosion and Sediment Control Public Facilities Manual, and BMP 6.1.2, Erosion and Sediment Control Design Standards.

Authority: Chesapeake City Code Chapter 26 Article III- Erosion and Sediment Control

Chesapeake City Code Chapter 26 Article VIII- Stormwater Management

Virginia Erosion and Sediment Control Law

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A), which requires a description of source control measures to reduce pollutants from

runoff from commercial and residential areas.

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which requires "A description of procedures for site planning which incorporate consideration of potential water quality impacts."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(2), which requires "A description of nonstructural and structural best management practices."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(4), which requires "A description of appropriate educational and training measures for construction site operators."

Roles and Responsibilities:

The Chesapeake Public Works Department is responsible for maintaining the Public Facilities Manual. The Public Communications Department Webmaster is responsible for maintaining the Departmental web page that includes a link to the Manual.

Contact Information:

Questions related to the Public Facilities Manual should be directed to:

City Engineer

Department of Public Works

(757) 382-8740

Policies and Procedures:

Chapters of the Public Facilities Manual that specifically address water quality and E&S control include:

Vol. I, Chapter I: Construction Plan Requirement

• Vol. I, Chapter IV: Plats

Vol. I, Chapter V: Drainage Design – Water Quality

• Vol. I, Chapter VI: Stormwater Quality

SOPs:

Not applicable.

Available Resources and References:

The Public Facilities Manual can be found online at:

http://cityofchesapeake.net/services/depart/pub-wrks/engineer-

publicfacilitiesmanual.shtml

Recordkeeping and

Reporting:

Any changes or updates to the Public Facilities Manual will be documented in

the annual report for the year when the changes are made.

Schedule of Activities:

The manual will continue to be available online throughout the MS4 Permit

period.

Section 3.3 E&S Control Education and Outreach

BMP 3.3.1 HR STORM

General Description: The City of Chesapeake participates in HR STORM, a regional stormwater

education initiative coordinated by the Hampton Roads Planning District

Commission (HRPDC).

BMP Goals and

Objectives:

The goal of participating in HR STORM is to provide stormwater-related education to residents and businesses within the City of Chesapeake with the

goal of minimizing the discharge of pollutants to the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: HR STORM is described in BMP 3.1.1 of this MS4 Plan.

Authority: See BMP 3.1.1.

Applicable Federal

Regulation:

See BMP 3.1.1.

Roles and See BMP 3.1.1.

Responsibilities:

Contact Information: See BMP 3.1.1.

Policies and

See BMP 3.1.1.

Procedures:

SOPs: See BMP 3.1.1.

Available Resources

and References:

See BMP 3.1.1.

Recordkeeping and

Reporting:

See BMP 3.1.1.

Schedule of Activities: See BMP 3.1.1.

Section 3.3 Erosion and Sediment Control Education and Outreach

BMP 3.3.2 Public Facilities Manual

General Description: The Public Facilities Manual details Chesapeake's design and construction

standards, as well as technical specifications for the construction of all public

facilities. The manual can be found online at:

http://cityofchesapeake.net/services/depart/pub-wrks/engineer-

publicfacilities manual.shtml

Chapter 1 in Volume I of the Manual contains guidance regarding erosion and sediment control requirements. Volume III Division 23 addresses technical

specifications for erosion and sediment control.

BMP Goals and Objectives:

The objective of this BMP is to provide contractors with information regarding proper erosion and sediment control practices for construction projects in the

City of Chesapeake.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: This BMP also addresses BMPs 3.2.1 and 3.3.2.

Authority: Chesapeake City Code Chapter 26 Article III- Erosion and Sediment Control

Applicable Federal

Regulation:

See BMP 3.2.1.

Roles and

Responsibilities:

See BMP 3.2.1.

Contact Information: See BMP 3.2.1.

Policies and Procedures:

Volume I, Chapter 1 of the Public Facilities Manual includes information regarding erosion and sediment control within the City of Chesapeake. It incorporates by reference the Virginia Erosion and Sediment Control Regulations and the Virginia Erosion and Sediment Control Handbook.

SOPs: Not applicable.

Available Resources and References:

The Public Facilities Manual can be found online at:

nd References: http://cityofchesapeake.net/services/depart/pub-wrks/engineer-publicfacilitiesmanual.shtml

Virginia Erosion and Sediment Control Regulations Virginia Erosion and Sediment Control Handbook

Recordkeeping and

Reporting:

See BMP 3.2.1.

Schedule of Activities: See BMP 3.2.1.

BMP 3.3.2, Public Facilities Manual

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City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

Section 3.4 Industrial Facility Education and Outreach

BMP 3.4.1 HR STORM

General Description: The City of Chesapeake participates in HR STORM, a regional stormwater

education initiative coordinated by the Hampton Roads Planning District

Commission (HRPDC).

BMP Goals and

The goal of participating in HR STORM is to provide stormwater-related education to residents and businesses within the City of Chesapeake with the **Objectives:**

objective of minimizing the discharge of pollutants to the MS4.

Reference Section of VPDES Permit:

To be completed later.

HR STORM is described in BMP 3.1.1 of this MS4 Plan. **Related Activities:**

See BMP 3.1.1. **Authority:**

Applicable Federal

Regulation:

See BMP 3.1.1.

Roles and

Responsibilities:

See BMP 3.1.1.

Contact Information: See BMP 3.1.1.

Policies and

Procedures:

See BMP 3.1.1.

SOPs: See BMP 3.1.1.

Available Resources

and References:

See BMP 3.1.1.

Recordkeeping and

Reporting:

See BMP 3.1.1.

Schedule of Activities: See BMP 3.1.1.

Section 3.5 General Education and Outreach

BMP 3.5.1 HR STORM

General Description: The City of Chesapeake participates in HR STORM, a regional stormwater

education initiative coordinated by the Hampton Roads Planning District

Commission (HRPDC).

BMP Goals and

The goal of participating in HR STORM is to provide stormwater-related education to residents and businesses within the City of Chesapeake with the **Objectives:**

objective of minimizing the discharge of pollutants to the MS4.

Reference Section of VPDES Permit:

To be completed later.

HR STORM is described in BMP 3.1.1 of this MS4 Plan. **Related Activities:**

See BMP 3.1.1. **Authority:**

Applicable Federal

Regulation:

See BMP 3.1.1.

Roles and

Responsibilities:

See BMP 3.1.1.

Contact Information:

See BMP 3.1.1.

Policies and

See BMP 3.1.1.

Procedures:

SOPs: See BMP 3.1.1.

Available Resources

and References:

See BMP 3.1.1.

Recordkeeping and

Reporting:

See BMP 3.1.1.

Schedule of Activities: See BMP 3.1.1.

Section 3.5 General Education and Outreach

BMP 3.5.2 Newsletter

General Description: Chesapeake Department of Public Works publishes a newsletter titled "Public

Works News" for the residents of Chesapeake.

BMP Goals and

Objectives:

The goal of this BMP is to educate and improve awareness of citizens, business owners, and the general public regarding erosion control and stormwater management issues, and to highlight related events, grant opportunities and recent city projects

Reference Section of VPDES Permit:

To be completed later.

Related Activities: See BMP 3.1.5.

Authority: See BMP 3.1.5.

Applicable Federal

Regulation:

See BMP 3.1.5.

Roles and

Responsibilities:

See BMP 3.1.5.

Contact Information: See BMP 3.1.5.

Policies and

See BMP 3.1.5.

Procedures:

SOPs: See BMP 3.1.5.

Available Resources

and References:

See BMP 3.1.5.

Recordkeeping and

Reporting:

See BMP 3.1.5.

Schedule of Activities: See BMP 3.1.5.

Section 3.5 General Education and Outreach

BMP 3.5.3 School Education Programs

General Description: Chesapeake Department of Public Works educates children regarding

stormwater issues by making presentations to school aged children.

BMP Goals and

Objectives:

The goal of this BMP is to promote awareness of stormwater pollution to

school aged children.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Chesapeake City Code Chapter 26 Article III – Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges

from municipal separate storm sewers."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(3), which requires "A description of practices for operating and maintaining public

streets, roads, and highways and procedures for reducing the impact on

receiving waters of discharges from municipal storm sewer systems, including

pollutants discharged as a result of deicing activities."

Roles and

Responsibilities:

The Department of Public Works is responsible for organizing school

educational activities.

Contact Information: Questions related to school education programs should be directed to:

Public Works Information Specialist

(757) 382-6983

Policies and Procedures:

The Department of Public Works Division of Stormwater Management makes presentations to schools upon request. They work with the school system's Standards of Learning (SOL) curriculum requirements. Science coordinators

work closely with the Information Specialist on this program.

SOPs: Not applicable.

Available Resources

and References:

Not applicable.

Recordkeeping and

Reporting:

The Department of Public Works Information Specialist documents the number school presentations and number in attendance and reports these numbers in the

MS4 Annual Report.

BMP 3.5.3, School Education Programs

Revision 0, May 2006

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Schedule of Activities: The City of Chesapeake Department of Public Works will continue to make

stormwater-related presentations to schools upon request throughout the MS4

Permit period.

Section 4.1 Public Notification and Planning Participation

Public Notification Requirements and Public Meetings BMP 4.1.1

General Description: Chesapeake notifies the public and holds public meetings as mandated by state

code for various stormwater-related activities.

BMP Goals and

Objectives:

The goal of this BMP is to provide opportunities for public comment during

Chesapeake's planning process for stormwater-related issues.

Reference Section of VPDES Permit:

To be completed later.

Meetings with civic leagues for the purpose of public education and **Related Activities:**

involvement are discussed in BMPs 3.1.10 and 4.2.1.

Authority: Virginia Freedom of Information Act (Virginia Code Title 2.2 Chapter 37)

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and

Responsibilities:

The Department of Planning is responsible for Planning Commission meetings, which address issues such as re-zoning and use permits. City Council also holds public meetings.

Contact Information:

Questions related to public involvement and public meetings should be directed

Director – Department of Planning

(757) 382-6176

Policies and **Procedures:** The City Planning Commission meets on the second Wednesday of every month. The Planning Commission hears requests for issues such as re-zoning and use permits. Recommendations of the Planning Commission are forwarded

to City Council.

City Council meets the second, third, and fourth Tuesday of each month. City

Council meetings are also open to the public.

The Chesapeake Bay Board and the Wetlands Board each hold hearings, open

to the public, once per month.

SOPs: Not applicable. Available Resources and References:

The schedules and agendas for the Planning Commission, City Council, and Chesapeake Wetlands/CPBA Board are provided on the website at: http://www.cityofchesapeake.net/services/depart/planning/index.shtml.

Recordkeeping and Reporting:

The MS4 Annual Report will track and report the number of public meetings held annually for stormwater related CIP projects, and stormwater-related ordinance changes.

Schedule of Activities:

The City will continue to hold public meetings on an as-needed basis annually during each year of the five-year permit cycle.

Section 4.1 Public Notification and Planning Participation

BMP 4.1.2 Comprehensive Planning

General Description: The Chesapeake Comprehensive Plan serves as the official guide for all planning

policy and implementation decisions, as they relate to private development, as well

as public facility and infrastructure management programs.

BMP Goals and Objectives:

The Chesapeake Comprehensive Plan is City Council's official policy for the physical development of the City. It serves as a guide to both the public and the

private sectors.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: The City of Chesapeake City Council adopted the current Comprehensive Plan on

March 9, 2005. Virginia State law sets requirements for municipalities'

comprehensive plans.

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

This BMP also addresses the goal of involving the public in the planning process.

Roles and Responsibilities:

The Comprehensive Plan is produced by the City Planning Commission and approved by City Council.

Contact Information:

Questions related to the comprehensive plan should be directed to:

Director – Department of Planning (757) 382-6176

Policies and Procedures:

The public is involved in the Comprehensive planning process through a series of Plan Advisory Team (PAT) meetings, Community meetings, and mailed questionnaires.

Section 3 of the Comprehensive Plan includes Stormwater Management. This section includes six goals, each with accompanying policy statements:

- The City will revise its Master Drainage Plan to consider present and future land use.
- Alternate means of managing stormwater will be considered.
- Regional stormwater management facilities will be incorporated into

- community design as prominent landmark features.
- Funding for purchasing and establishing riparian corridors will be considered when available to provide passive recreational opportunities as well as enhance the areas water quality benefits.
- Enhanced stormwater management strategies in older neighborhoods, especially with chronic drainage problems, will be developed by the Public Works Department and funded in the Capital Improvement Budget.

SOPs: Not applicable.

Available Resources and References:

The Comprehensive Plan is available on the City's website at http://www.cityofchesapeake.net/services/depart/planning/comprehensiveplan.shtml.

Recordkeeping and Reporting:

Periodic progress reports on all of the above efforts will be included as a component of an environmental report to City Council. Any resulting modifications to the City's stormwater program will be documented in the MS4 Annual Reports.

Schedule of Activities:

The Comprehensive Plan is updated approximately once every five years. The most recent plan was approved by City Council in 2005.

Section 4.2 Public Comment and Input

BMP 4.2.1 Meetings with Civic Leagues

General Description: The City of Chesapeake meets with civic leagues to address any major flood

improvement projects, erosion control issues, and other stormwater-related

issues.

BMP Goals and Objectives:

The objective of this BMP is to keep residents informed of major flood improvement projects in their neighborhood, make them aware of the importance of pollution prevention as it is related to the stormwater drainage

system, and allow them opportunities for input and comments.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: This BMP also partially addresses BMP 4.1.1, Public Notification

Requirements and Public Meetings. Educational meetings with civic leagues

are addressed in BMP 3.1.10 of this MS4 Plan.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Chesapeake City Code Chapter 26 Article III – Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and Responsibilities:

The Department of Public Works Division of Stormwater Management is responsible for addressing civic leagues regarding major flood improvement projects in their neighborhood, erosion control, and stormwater issues.

Contact Information: Questions related to meetings with civic leagues should be directed to:

Public Works Information Specialist

(757) 382-6983

Policies and Procedures:

The Department of Public Works is responsible for giving presentations to civic groups upon request. Staff may address civic leagues throughout the planning process of any major flood improvement projects, discuss erosion control issues, or discuss other stormwater-related issues. Residents are kept informed and allowed opportunities to comment through civic league meetings.

SOPs: Not applicable.

Available Resources and References:

Not applicable.

BMP 4.2.1, Meetings with Civic Leagues Revision 0, May 2006

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Recordkeeping and Reporting:

The MS4 Annual Report will document major flood improvement projects and

the number of meetings held with civic leagues.

Schedule of Activities:

Meetings with civic leagues to discuss major flood improvement projects or other stormwater related issues will occur on an as-needed basis throughout the

permit period.

Section 4.2 Public Comment and Input

BMP 4.2.2 Website/Telephone Hotline

General Description: The City of Chesapeake has implemented a citizen concern hotline to allow

residents to report concerns City-wide.

BMP Goals and

Objectives:

The goal of this BMP is to allow the City to receive and respond to citizen complaints concerning illegal or suspicious behavior involving possible

violations to the City's Stormwater Management Ordinance.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: The telephone hotline is publicized in the newsletter and on the City website.

See BMPs 3.1.8 and 3.1.9

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Chesapeake City Code Chapter 26 Article III – Erosion and Sediment Control

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(5), which requires "A description of a program to promote, publicize, and facilitate public

reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers."

Roles and

Responsibilities:

The Department of Neighborhood Services is responsible for the hotline.

Contact Information: Questions related to the hotline should be directed to:

Call Center Manager (757) 382-6275

Policies and Procedures:

The City of Chesapeake has instituted a Citizen Concern Hotline (382-CITY). This hotline is accessible from 8:30am to 5pm Monday through Friday. An automated answering service is available after regular hours. Complaints or concerns can also be reported online 24 hours per day. The Customer Contact Center documents calls to the Hotline. The information is given to a customer advocate, who utilizes a contact list to route the information to the appropriate

department.

SOPs: Not applicable.

Available Resources and References:

The Citizen Concern Hotline is publicized online at: http://www.cityofchesapeake.net/contact.shtml

(757) 382-CITY (2489)

Recordkeeping and

Reporting:

The City documents the number of calls received that reported some type of problem or issue related to stormwater. These calls and the actions taken are

provided in the MS4 Annual Report.

BMP 4.2.2, Website/Telephone Hotline

Revision 0, May 2006

Page 4.2.2-1

Schedule of Activities:

The telephone hotline will continue to be publicized and made available to the public for reporting of illicit discharges and other environmental concerns throughout the five-year permit period.

Section 4.2 Public Comment and Input

BMP 4.2.3 Volunteer Litter Removal Programs

General Description: The Department of Parks and Recreation administers several volunteer litter

removal programs and participates in Clean the Bay Day.

BMP Goals and

Objectives:

The objectives of this BMP are to provide a means by which citizens can get involved in environmental clean-up and to remove litter from the City.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Chesapeake City Code Chapter 62 – Solid Waste

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(3), which requires "A description of practices for operating and maintaining public streets, roads, and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of deicing activities."

Roles and

Responsibilities:

The Department of Parks and Recreation is responsible for organizing

volunteer litter removal activities.

Contact Information: Questions related to volunteer litter removal should be directed to:

Parks and Recreation Special Projects Coordinator

(757) 382-6542

Policies and Procedures:

The Department of Parks and Recreation administers the following volunteer litter removal programs:

- Adopt-A-Spot/Highway
- Adopt-A-Garden
- Clean the Bay Day
- Keep Chesapeake Beautiful
- Great American Clean Up

In addition, the Department of Parks and Recreation provides litterbags at Chesapeake events.

SOPs: Not applicable.

Available Resources and **References**:

Not applicable.

Recordkeeping and Reporting:

The Department of Parks and Recreation documents the approximate number of events and volunteers, and the approximate amount of debris (by weight) removed.

Schedule of Activities:

Activity	Schedule
Continue Adopt-A-Spot Program	Years 1 through 5
Organize at least one annual volunteer clean-up event	Years 1 through 5
per year.	

Section 5.1 Outfall Update

BMP 5.1.1 Storm Sewer Maps and Updates

General Description: The City of Chesapeake maintains maps of its storm sewer system.

BMP Goals and Objectives:

The goal this BMP is to maintain up-to-date maps of the storm sewer system so that other aspects of the City's stormwater management program can be

accomplished.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

This BMP is also necessary to provide knowledge of the location of the stormwater system so that other requirements can be accomplished.

Roles and Responsibilities:

The Department of Public Works Division of Stormwater Management is responsible for maintaining storm sewer system mapping.

Contact Information: Questions related to storm sewer system mapping should be directed to:

Public Works GIS Manager

(757) 382-6697

Policies and Procedures:

The Department of Public Works Division of Stormwater Management maintains and updates maps of the storm sewer system. The maps are in

electronic format and many are in GIS format.

SOPs: Not applicable.

Available Resources and References:

Stormwater system maps.

Recordkeeping and Reporting:

Maps of the storm sewer system will continue to be available in the Department

of Public Works Division of Stormwater Management.

Schedule of Activities: The Department of Public Works Division of Stormwater Management will

continue to maintain the City's stormwater maps and revise them as necessary.

BMP 5.1.1, Storm Sewer Maps and Updates

Revision 0, May 2006

Page 5.1.1-1

City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

Section 5.2 Illicit Discharge Detection and Elimination

BMP 5.2.1 Stormwater Management Ordinance

General Description: The Department of Public Works actively administers and enforces the

Stormwater Management Ordinance.

BMP Goals and

Objectives:

The goal of Stormwater Management Ordinance is to authorize the City to

control non-stormwater discharges to the storm sewer system.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

Not applicable.

Authority:

Chesapeake City Code Chapter 26 Article VIII Stormwater Management

Federal Clean Water Act Virginia Code Title 15.2

Virginia Stormwater Management Regulations

Virginia Stormwater Management Law

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(1), which requires "A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the

municipal separate storm sewer system...."

Roles and

Responsibilities:

The Director of the Department of Public Works and/ or his/her designee

administers and enforces the ordinance.

Contact Information:

Questions related to the Stormwater Management Ordinance should be directed

to:

Stormwater Administrator

(757) 382-3321

Policies and Procedures:

The Stormwater Management Ordinance prohibits illicit discharges to the City stormwater system. As defined in the Section 26-344 of the ordinance, the storm sewer system includes "all publicly maintained manmade facilities, structures and natural watercourses used for collecting and conducting stormwater to, through, and from drainage areas to the points of final outlet including but not limited to any and all of the following: inlets, conduits and appurtenant features, canals, creeks, channels, catch basins, ditches, streams, gulches, gullies, flumes, culverts, siphons, retention or detention basins, dams, floodwalls, levees, pumping stations, street paving and curb and gutter."

The ordinance prohibits discharging, or causing or allowing the discharge of, "sewage, industrial wastes or other wastes into the stormwater management facilities, or any component thereof, or onto driveways, sidewalks, parking lots or other areas draining to stormwater management facilities." The ordinance also prohibits the connection of any sanitary sewer to the storm sewer system.

The discharge of the following is prohibited in any amount:

- sewage
- blowdown
- automotive fluids and/or greases
- fuels
- paints and/or organic solvents
- PCBs
- pesticides
- toxic materials
- waste disposal site leachate
- radioactive materials
- vegetative material
- other substance of non-stormwater origin unless specifically exempted from this ordinance

Discharges associated with water line flushing, landscape irrigation, diversion of stream flows, uncontaminated groundwater, lawn watering, individual car washing on residential properties, dechlorinated swimming pool discharges, street washing, and activities covered by VPDES or VPA permits are not considered illicit discharges.

The ordinance also prohibits additional discharges into private drainage facilities or connections to any stormwater management facilities where materials may enter the MS4, unless the discharge is permitted by a VPDES permit. According to Section 26-347, "It shall be unlawful to discharge:

- (a) Matter of any type or at any temperature or in any quantity which may:
 - (1) Interfere with the proper operation of municipal stormwater management facilities;
 - (2) Obstruct a stormwater management facility or the flow therein;
 - (3) Result in a hazard to any person, animal, property or vegetation; or,
 - (4) Impair the quality of the water in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse.
- (b) Without limiting the generality of the foregoing, any of the following:
 - (1) Water at a temperature greater than 65° Celsius;
 - (2) Water having a pH less than 6.0 or greater than 9.0;
 - (3) Water containing more than 15 milligrams per liter of suspended solids;
 - (4) Water containing dyes or coloring material which discolor the water; or,
 - (5) Water containing material which causes a visible film, sheen or discoloration on the water surface:
- (c) It shall be unlawful for any person to put, or allow to be put, organic matter or any other substance in stormwater management facilities, so as to cause or do any injury thereto, or in any manner pollute stormwater management facilities.
- (d) It shall be unlawful for any person to pour or discharge, or to permit to be poured or discharged, or to deposit, so that the same may

be discharged, any gasoline, oil waste, antifreeze, or other automotive, motor or equipment fluids into any stormwater management facility.

(e) It shall be unlawful for any commercial, industrial, or manufacturing entity to discharge process water, wash water, or unpermitted discharge into any stormwater management facility."

The ordinance also addresses pesticides, herbicides, and fertilizers; construction activities, and good housekeeping requirements.

Section 26-369 of the ordinance specifies penalties for violating the ordinance. In addition to any criminal penalties provided, any person violating or failing, neglecting or refusing to obey an injunction, mandamus is subjected, in the discretion of the court, to a civil penalty.

Violations of the Ordinance would be considered a class 1 misdemeanor and subjected to penalty per day per violation.

SOPs: Not applicable.

Available Resources and References:

The Stormwater Management Ordinance is included in Appendix B of this document.

Recordkeeping and Reporting:

The Stormwater management Ordinance will continue to be available at www.municode.com. If the ordinance is revised, changes will be documented in the MS4 Annual Report for the year that revisions are approved. The MS4 Annual Report will document the number of illicit discharges identified and eliminated during each year of the permit cycle.

Schedule of Activities:

The Department of Public Works will continue to keep a list describing the number and nature of enforcement actions under the Stormwater Management Ordinance on file. The Department of Public Works will continue to report the number of illicit discharges detected and corrected annually.

Section 5.2 Illicit Discharge Detection and Elimination

BMP 5.2.2 Illicit Discharge Source Identification and Documentation of Discharges Detected and Eliminated

General Description: The Department of Public Works Division of Stormwater Management actively

works to identify and eliminate illicit discharges that are detected.

BMP Goals and Objectives:

The goal of this BMP is to identify the sources of and eliminate illicit discharges that have been detected through dry weather screening, public

reporting, or other methods.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 5.2.3 of this MS4 Plan addresses the dry weather screening program.

Authority: Chesapeake City Code Chapter 26 Article VIII - Stormwater Management,

Section 26-346: Illicit Discharges

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(3), which requires "A description of procedures to be followed to investigate portions of the separate storm sewer that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water (such procedures may include:

sampling procedures for constituents such as fecal coliform, fecal

streptococcus, surfactants (MBAS), residual chlorine, fluorides and potassium; testing with fluorometric dyes; or conducting in storm sewer inspections where safety and other considerations allow. Such description shall include the location of storm sewers that have been identified for such evaluation.)"

Roles and Responsibilities:

The Department of PublicWorks Division of Stormwater Management is responsible for implementing this BMP.

Contact Information:

Questions related to procedures for detecting and eliminating illicit discharges within the City of Chesapeake should be directed to:

•

Stormwater Administrator

(757) 382-3321

Policies and Procedures:

The Department of Public Works Division of Stormwater Management investigates suspected illicit discharges into the storm water system. An investigation is initiated as soon as the department receives notice of a potential violation. First, a map of the watershed for that structure or outfall is obtained from various files. Using the map, the stormwater system in the area is evaluated. Inspections consist of a visual observation of an outfall or structure to check for discharges or signs indicating a discharge. Upstream sample locations are targeted for industrial or commercial areas where illicit

connections/ illegal dumping are most likely to occur.

BMP 5.2.2, Illicit Discharge Source Identification and Documentation of Discharges Detected and Eliminated

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Flows found during dry weather sampling are followed through the system by opening structures to find the point of origin. When the point of origin is established, the physical characteristics of the flow are reviewed and the following are noted: flow, color, odor, turbidity, oil sheen, and surface scum. The basic characteristics are analyzed by using a CHEMetrics Storm Water Test Kit and digital pH meter. These methods allow for monitoring of the following: pH, total chlorine, total copper, phenols, and detergents. If the source is identified as an illegal discharge, the City notifies the offender to cease discharge, educates them on the violation, and sometimes requires them the clean the system. The City may also pursue legal action if necessary. If tracking efforts reveal a cross connection with the sanitary sewer system, the City's Public Utilities Department corrects the problem. If the problem is caused by groundwater seeping into the storm pipes, the Department of Public Works corrects the problem.

SOPs: Not applicable.

Available Resources and References:

Not applicable.

Recordkeeping and Reporting:

The City tracks and reports the number of illicit discharges identified and eliminated annually in the MS4 Annual Report.

Schedule of Activities:

Activity	Schedule
Continue to implement methods to identify the source	Years 1 through 5
of any suspected illicit discharges.	
Track and report the number of illicit discharges	Years 1 through 5
identified and eliminated annually.	
Review and revise, if necessary, SOPs for identifying	Year 3
composition of illicit discharges.	

Section 5.2 Illicit Discharge Detection and Elimination

BMP 5.2.3 Dry Weather Screening Program

General Description: The Department of Public Works Division of Stormwater Management actively

works to detect illicit discharges by performing dry weather screening.

BMP Goals and

Objectives:

The goal of this BMP is to identify potential illicit discharges by conducting

dry weather screening.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Follow-up monitoring for suspected illicit discharges is discussed in BMP 5.2.2

of this MS4 Plan.

Authority: Chesapeake City Code Chapter 26 Article V111 - Stormwater Management,

Section 26-346 Illicit Discharges

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(1), which requires "A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the

municipal separate storm sewer system...."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(2), which requires "A description of procedures to conduct on-going field screening activities during the life of the permit, including areas or locations

that will be evaluated by such field screens."

Roles and Responsibilities: The Department of Public Works Division of Stormwater Management is

responsible for conducting dry weather screening.

Contact Information: Questions related to procedures for dry weather screening or detecting and

eliminating illicit discharges within the City of Chesapeake should be directed

to:

Stormwater Administrator

(757) 382-3321

Policies and Procedures:

The Department of Public Works Division of Stormwater Management conducts dry weather monitoring throughout the year. Dry weather screening sites are chosen at random with commercial and industrial areas targeted for screening when possible. Generally, Chesapeake has limited opportunities for screening in industrial areas as few industries that discharge to the MS4.

Each Annual Workplan will identify 24 sites, with at least four sites in industrial areas, for inspection in the upcoming year. The Workplan will also identify 5 alternate sites. Field inspection will determine the final selection of field screening points. Where possible, the field screening analysis will be performed at the point selected in the Annual Workplan. If the selected outfall

is either inaccessible or submerged, the field crews will trace the storm sewer upstream until they identify an appropriate field screening site. If a non-submerged location in the selected storm sewer system cannot be found, an alternate site, as identified in the Annual Workplan, will be utilized.

Field inspections are intended to be conducted during dry weather. Inspections must occur at least 72 hours after the most recent precipitation measuring 0.10 inch or more.

If flow is detected at the dry weather screening sites, a field screening analysis will be conducted. The field analysis includes descriptive data concerning flow, color, odor, turbidity, oil sheen, and surface scum, as well as analytical data including pH, total chlorine, total copper, total phenol, detergents, and ammonia. The field crews complete a field screening data form for each dry weather inspection performed.

SOPs: Not applicable.

Available Resources and References:

"General Guidelines for Dry Weather Field Screening" (CDM, 1992).

Dry weather screening form (See Appendix C).

Recordkeeping and Reporting:

The City reports the results of the dry weather screening at 24 sites annually in the MS4 Annual Report. A list of 24 sites to be monitored in the upcoming year will be included in the MS4 Annual Workplan.

Schedule of Activities:

Activity	Schedule
Perform dry weather screening at 24 sites annually,	Years 1 through 5
including at least 4 industrial sites.	

Section 5.3 Sanitary Sewer Seepage into MS4

BMP 5.3.1 Inflow and Infiltration Reduction Program and Sanitary Sewer Upgrade

General Description: The Department of Public Utilities Reliability Division actively works to

perform upgrades to reduce inflow and infiltration into its sanitary sewer

system and to improve the system's integrity.

BMP Goals and

Objectives:

The goal of this BMP is to reduce the amount of inflow and infiltration into the

MS4 and to reduce the potential for breaks and leaks.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article VIII: Stormwater Management.

Chesapeake City Code Chapter 78: Utilities

Virginia Sewerage Regulations

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(7), which

requires "A description of controls to limit infiltration of seepage from

municipal sanitary sewers to municipal separate storm sewer systems where

necessary".

Roles and

Responsibilities:

To be completed later.

Contact Information: Questions regarding the Public Utilities Department's inflow and infiltration

and sanitary sewer upgrade programs should be directed to:

Water/Wastewater Administrator Department of Public Utilities

(757) 382-3402

Policies and **Procedures:** To be completed later.

SOPs:

To be completed later.

Available Resources

and References:

To be completed later.

Recordkeeping and

Reporting:

The City tracks and reports investigative work and upgrades performed to the sanitary sewer system on an annual basis. This information will be reported in

the MS4 Annual Report.

Schedule of Activities: To be completed later.

BMP 5.3.1, Inflow and Infiltration Reduction Program and Sanitary Sewer Upgrade Revision 0, May 2006

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City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

Section 5.4 Landfills, TDS, and SARA 313

BMP 5.4.1 As-Needed Inspections of TDS Facilities

General Description: The Chesapeake Fire Department inspects transfer, disposal, and storage (TDS)

facilities as needed.

BMP Goals and

Objectives:

The goal of this BMP is to inspect TDS facilities to ensure that materials are

being stored properly.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: BMP 5.4.2 discusses inspections of EPCRA 313 facilities.

Authority: Chesapeake City Code Chapter 26 Article VIII Stormwater Management

Chesapeake City Code Chapter 34 Fire Prevention and Protection

National Fire Protection Association codes, standards, and recommended

practices

Virginia Statewide Fire Protection Code

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(C)(1), which requires a program to "identify priorities and procedures for inspections and

establishing and implementing control measures for such discharges."

Roles and

Responsibilities:

The Chesapeake Fire Department is responsible for the inspection program.

Contact Information: Questions related to the TDS inspection program should be directed to:

Fire Marshal's Office

Environmental Quality Coordinator

(757) 382-6803

Policies and

Procedures:

The Chesapeake Fire Department is responsible for inspecting TDS facilities and other facilities determined to be contributing substantial pollutant loadings.

At this time inspections are incident or complaint driven.

SOPs: Not applicable.

Available Resources and References:

Not applicable.

Recordkeeping and

Reporting:

Records of the inspections are kept by the Fire Department. The number of inspections performed annually will be reported in the MS4 Annual Report.

Schedule of Activities:

All businesses in the City of Chesapeake are inspected "as needed". At the present time, inspections are complaint or incident driven. The inspection includes the assessment of any hazardous situations potentially caused by spills of hazardous materials. Stormwater training for fire inspectors will be conducted in FY 07.

Section 5.4 Landfills, TDS, and SARA 313

BMP 5.4.2 As-Needed Inspections of SARA 313 Facilities

General Description: The Chesapeake Fire Department inspects facilities subject to Section 313 of

EPCRA as needed.

BMP Goals and

Objectives:

The goal of this BMP is to inspect facilities subject to Section 313 of EPCRA to ensure that materials are being stored properly to reduce the potential for

discharge of pollutants to the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 5.4.1 of this MS4 Plan describes as-needed inspections of TDS facilities.

Authority: Chesapeake City Code Chapter 26 Article VIII Stormwater Management

Chesapeake City Code Chapter 34 Fire Prevention and Protection

National Fire Protection Association codes, standards, and recommended

practices

Virginia Statewide Fire Protection Code

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(C)(1), which requires a program to "identify priorities and procedures for inspections and establishing and implementing control measures for such discharges."

Roles and

Responsibilities:

The Chesapeake Fire Department is responsible for the inspection program.

Contact Information: Questions related to the SARA 313 inspection program should be directed to:

Fire Marshal's Office

Environmental Quality Coordinator

(757) 382-6803

Policies and Procedures:

The Chesapeake Fire Department is responsible for inspecting facilities subject to Section 313 of EPCRA and other facilities determined to be contributing substantial pollutant loadings. The Chesapeake Fire Department is responsible for inspecting TDS facilities and other facilities determined to be contributing substantial pollutant loadings. At this time inspections are incident or complaint driven. The inspection includes the assessment of any hazardous situations

potentially caused by spills of hazardous materials.

SOPs: Not applicable.

Available Resources

Recordkeeping and

List of SARA 313 Facilities (See Appendix C).

and References:

Records of the inspections are kept by the Fire Department. The number of inspections performed annually will be reported in the MS4 Annual Report.

BMP 5.4.2, As-Needed Inspections of SARA 313 Facilities

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Reporting:

Schedule of Activities:

All businesses in the City of Chesapeake are inspected on an as needed basis. At the present time, inspections are complaint or incident driven. The inspection includes the assessment of any hazardous situations potentially caused by spills of hazardous materials. Stormwater training for fire inspectors will be conducted in FY 07.

Section 5.5 Industrial Stormwater

BMP 5.5.1 List of VPDES-Permitted Industrial Facilities

General Description: The City of Chesapeake obtains an updated list of VPDES-permitted industrial

facilities from DEQ annually.

BMP Goals and

Objectives:

The objective of tracking VPDES-permitted industrial facilities is to know

where potential illicit discharges might occur.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article VIII- Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(3), which requires "A description of procedures to be followed to investigate portions of the separate storm sewer that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water (such procedures may include:

sampling procedures for constituents such as fecal coliform, fecal streptococcus, surfactants (MBAS), residual chlorine, fluorides and potassium;

testing with fluorometric dyes; or conducting in storm sewer inspections where safety and other considerations allow. Such description shall include the location of storm sewers that have been identified for such evaluation.)"

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(C)(1), which requires a program to "identify priorities and procedures for inspections and establishing and implementing control measures for such discharges."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(C)(2), which requires a description of "a monitoring program for stormwater discharges associated with the industrial facilities identified in paragraph (d)(2)(iv)(C) of this section..."

Roles and Responsibilities:

The Department of Public Works Division of Stormwater Management is responsible for obtaining an updated list of VPDES-permitted industrial

dischargers within the City from DEQ on an annual basis.

Contact Information: Questions related to the list of VPDES-permitted industrial dischargers should

be directed to:

Stormwater Administrator

(757) 382-3321

Policies and Procedures:

The Department of Public Works requests an updated list of VPDES-permitted

industrial dischargers within the City each year from DEQ. This list is

BMP 5.5.1, List of VPDES-Permitted Industrial Facilities

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maintained in the Department of Public Works Division of Stormwater

Management. The Chesapeake Fire Marshall's Office will inspect facilities on a

complaint or incident driven basis.

SOPs: Not applicable.

Available Resources and References:

The current list is provided in Appendix C of this MS4 Plan.

Recordkeeping and

The list is obtained annually and kept on file in Appendix C of this MS4 Plan.

Reporting: Schedule of Activities:

The Department of Public Works Division of Stormwater Management will

continue to obtain an updated list annually from DEQ.

Section 5.6 Spill Response

BMP 5.6.1 Petroleum and Hazardous Materials Spills

General Description: The Department of Public Works and the Fire Department partner to handle

various hazardous material spills. They implement procedures to prevent,

contain, and respond to these spills

BMP Goals and

Objectives:

The goal of this BMP is to prevent petroleum and hazardous material spills from reaching the MS4 through spill prevention, response, and containment.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Chesapeake City Code Chapter 26 Article VIII Stormwater Management

Chesapeake City Code Chapter 34 Fire Prevention and Protection

National Fire Protection Association codes, standards, and recommended

practices

Virginia Statewide Fire Protection Code

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(4), which requires "A description of procedures to prevent, contain, and respond to spills

that may discharge into the municipal separate storm sewer."

Roles and

Responsibilities:

The Fire Department administers the Hazardous Materials Emergency

Response program.

Contact Information: Questions related to the Hazardous Materials Emergency Response program

should be directed to:

Battalion Chief - Hazmat

Fire Station #5 (757) 382-6074

Policies and Procedures:

The Fire Department responds to petroleum and hazardous materials spills in accordance with the Fire Department's Standard Operation Procedures.

SOPs: SOPs for petroleum and hazardous material spill response are given in the

following Fire Department Standard Operation Procedures (included in

Appendix C):

• 22.9 - Engine Company Response: HazMat Incidents

22.22 – Tactical Plans Hazardous Materials

22.23 - Tactical Plans Hazardous Materials Special Considerations

22.23a - Tactical Plans Hazardous Materials Reference List

22.24 - Hazardous Materials Incident Report; Responsibility

■ 60.1 – Notification/ Response of "On-call" Fire Marshal/ Inspector

Available Resources and References:

- City of Chesapeake Petroleum Spill Prevention, Control, and Countermeasures (SPCC) Plan (See Appendix C)
- Chesapeake Water Treatment Plant Proper Handling of Plant Chemicals and Hazardous Waste Procedures (See Appendix C)
- Chesapeake Water Treatment Plant Emergency Response Procedures (See Appendix C)
- Chesapeake Water Treatment Plant Hazard Communication Program and Emergency Response Procedures (See Appendix C)
- Stormwater Pollution Who to Contact (See Appendix C)
- Spill Notification and Cleanup Log (See Appendix C)

Recordkeeping and Reporting:

The number of spill responses made by the City, as well as quantities and substances spilled are reported in the MS4 Annual Report.

Schedule of Activities:

The Fire Department will continue to respond to petroleum and hazardous materials spills on an as-needed basis. The number of spill responses made by the City will continue to be reported annually.

Section 5.6 Spill Response

BMP 5.6.2 Sanitary Sewer Spills

General Description: The Department of Public Utilities responds to sanitary sewer spills.

BMP Goals and Objectives:

The goal of this BMP is to prevent sanitary sewer spills from reaching receiving waters through spill prevention, response, and containment.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 5.6.3 describes the regional web-based sewer spill reporting system

administered by HRPDC and DEQ.

Authority: City Code Chapter 78: Utilities

Virginia Sewerage Regulations

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(4), which requires "A description of procedures to prevent, contain, and respond to spills

that may discharge into the municipal separate storm sewer."

Roles and

Responsibilities:

The Department of Public Utilities is responsible for responding to sanitary

sewer spills.

Contact Information: Questions regarding the Public Utilities Department's response to sanitary

sewer spills should be directed to:

Water/Wastewater Administrator Department of Public Utilities

(757) 382-3402

Policies and Procedures:

To be completed later.

SOPs: To be completed later.

Available Resources and References:

Not applicable.

Recordkeeping and

Reporting:

The number of spill responses made by the City is reported in the MS4 Annual

Report.

Schedule of Activities:

Activity	Schedule
Report number and volume of spills annually	Years 1 through 5
Develop written SOP for sanitary sewer spills	Year 3

Section 5.6 Spill Response

BMP 5.6.3 Regional Web-Based Sanitary Sewer Spill Reporting System

General Description: Chesapeake participates in a regional web-based sanitary sewer spill reporting

system.

BMP Goals and Objectives:

The goal of this BMP is to track sanitary sewer spills on a regional basis.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 5.6.2 describes Chesapeake's procedures for response to sanitary sewer

spills.

Authority: • HR SSORS was established through the HRPDC Directors of Utilities

Committee, in cooperation with the Virginia Department of Environmental Quality, in 2004 and incorporated in the Regional Wastewater Program and HRPDC Annual Work Program in March

2004.

• Virginia Sewerage Regulations

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(4), which requires "A description of procedures to prevent, contain, and respond to spills

that may discharge into the municipal separate storm sewer."

Roles and

Responsibilities:

The Department of Public Utilities is responsible for sanitary sewer spill

reporting.

Contact Information: Questions regarding the Public Utilities Department's sanitary sewer spill

reporting program should be directed to:

Water/Wastewater Administrator Department of Public Utilities

(757) 382-3402

Policies and Procedures:

The Department of Public Utilities makes notification to DEQ through the DEQ/HRPDC Sanitary Sewer Overflow Reporting System (SSORS). SSORS is a web-based spill reporting and tracking system developed by the HRPDC that simplifies the initial notification and 5-day letter reporting requirements for sanitary sewer overflows. Once Chesapeake logs into the SSORS system and enters necessary data, a report is automatically sent to DEQ and, for spills exceeding 1,000 gallons, to the Virginia Health Department.

Data collected by SSORS includes the date and time of reporting, date and time of the incident, location of the incident, possible receptors/affected water body, material spilled, amount spilled, amount cleaned up, amount reaching state waters, and corrective actions taken.

SSORS provides a summary of spill reports, upon request, that can be

downloaded into Microsoft Excel or similar programs.

SOPs: Not applicable.

Available Resources and References:

SSORS

Recordkeeping and

Reporting:

Data is stored in the SSORS system. Reports can be printed out at any time. A summary of spills during the past year will be included in the MS4 Annual

Report.

Schedule of Activities: Chesapeake will continue to participate in the regional web-based sanitary

sewer spill reporting system throughout the five-year permit period.

Section 6.1 General Standards

BMP 6.1.1 Erosion and Sediment Control Program

General Description: The City of Chesapeake implements an erosion and sediment control program

in accordance with State requirements.

BMP Goals and

Objectives:

The goal of this BMP is to administer an erosion and sediment control program in accordance with State requirements to reduce the discharge of pollutants to

the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

City Code Chapter 26, Article III: Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which requires "a description of procedures for site planning which incorporate

consideration of potential water quality impacts."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(2), which requires "a description of requirements for nonstructural and structural best

management practices."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(3), which requires "A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of receiving water

quality."

Roles and

Responsibilities:

The Department of Public Works is responsible for administering and enforcing

the City's erosion and sediment control program.

Contact Information: Questions regarding Chesapeake's erosion and sediment control program

should be directed to:

Director- Department of Public Works

(757) 382-6226

Policies and Procedures:

The City of Chesapeake implements an erosion and sediment control program in accordance with State guidelines. Chesapeake will use its existing E&S control program to meet the construction site runoff control requirements in its

VSMP MS4 discharge permit.

Chesapeake's erosion and sediment control program is administered and enforced by the Department of Public Works. Chesapeake will continue to

BMP 6.1.1, Erosion and Sediment Control Program

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work with DCR to achieve an evaluation of "consistent" for its erosion and sediment control program.

SOPs: Not applicable.

Available Resources and References:

- Virginia Erosion and Sediment Control Handbook
- Virginia Erosion and Sediment Control Law
- Virginia Erosion and Sediment Control Regulations

Recordkeeping and Reporting:

The MS4 Annual Report will document status of the erosion and sediment control program, as well as any efforts to improve the program and/or to comply with State guidelines.

Schedule of Activities:

The Department of Public Works will continue to administer the E&S control program in accordance with State requirements, and to work to achieve and maintain a rating of "consistent" throughout the five-year permit period.

Section 6.1 General Standards

BMP 6.1.2 Erosion and Sediment Control Ordinance

General Description: The City's Erosion and Sediment Control Ordinance is Article III of Chapter 26

of the City Code.

BMP Goals and

Objectives:

The goal of this BMP is to minimize the impact of construction activity on receiving waters by establishing requirements for erosion and sediment control

in accordance with State requirements.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not Applicable.

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

Chapter 26, Article III of City Code: Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which requires "a description of procedures for site planning which incorporate

consideration of potential water quality impacts."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(2), which requires "a description of requirements for nonstructural and structural best

management practices."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(3), which requires "A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of receiving water

quality."

Roles and

Responsibilities:

The Department of Public Works is responsible for administering the City's erosion and sediment control program and enforcing the Erosion and Sediment

Control Ordinance.

Contact Information: Questions regarding Chesapeake's Erosion and Sediment Control Ordinance

should be directed to:

Director - Department of Public Works

(757) 382-6226

Policies and Procedures:

The Erosion and Sediment Control Ordinance is intended to: "conserve the land, water, air and other natural resources of the city and promote the public health and welfare of the people in the city by establishing requirements for the control of erosion and sedimentation and by establishing procedures whereby

these requirements shall be administered and enforced."

The Erosion and Sediment Control Ordinance requires compliance with the Virginia Erosion and Sediment Control Regulations, Virginia Erosion and Sediment Control Handbook, and any additional requirements adopted by the City. The Ordinance requires that the City approve an Erosion and Sediment Control Plan before land-disturbing activity can commence. The Ordinance also establishes permits and fees, and authorizes the City to perform inspections and implement enforcement actions, including notices to comply or stop work orders when required.

Violations of the Ordinance constitute a Class 1 misdemeanor. Additional civil and criminal penalties may also apply.

SOPs: See BMP 6.3.1.

Available Resources and References:

- Virginia Erosion and Sediment Control Handbook
- Virginia Erosion and Sediment Control Law
- Virginia Erosion and Sediment Control Regulations

Recordkeeping and Reporting:

City Code Chapter 26, Article III: Erosion and Sediment Control, will continue to be available at www.municode.com. If the ordinance is revised, changes will be documented in the MS4 Annual Report for the year that revisions are approved.

Schedule of Activities:

The Chesapeake Department of Public Works will continue to enforce the Erosion and Sediment Control Ordinance throughout the five-year permit period.

Section 6.2 Design Standards

BMP 6.2.1 Design Standards and Site Plan Review

General Description: The City of Chesapeake reviews site plans and erosion and sediment control

plans to ensure compliance with local and State requirements.

BMP Goals and

Objectives:

The goal of this BMP is to minimize the impact of land-disturbing activities on receiving waters by requiring that contractors comply with State erosion and

sediment control requirements.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 6.1.1: Erosion and Sediment Control Program

BMP 6.1.2: Erosion and Sediment Control Ordinance

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

City Code Chapter 26, Article III: Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which requires "a description of procedures for site planning which incorporate

consideration of potential water quality impacts."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(2), which requires "a description of requirements for nonstructural and structural best

management practices."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(4), which requires "a description of appropriate educational and training measures for

construction site operators."

Roles and

Responsibilities:

The Chesapeake Department of Public Works is responsible for maintaining the programs and regulations regarding erosion and sediment control requirements,

including plan review.

Contact Information: Stormwater-related questions regarding erosion and sediment control design

standards and site plan review should be directed to:

Director- Department of Public Works

(757) 382-6226

Policies and Procedures:

Chapter 26 Article III of the City Code (BMP 6.1.2) requires compliance with the Virginia Erosion and Sediment Control Regulations and the Virginia Erosion and Sediment Control Handbook. Chesapeake requires Erosion and Sediment Control Plans for all projects that disturb 10,000 square feet or more

of land area or 2,500 square feet or more of land area in the CBPA.

The Department of Public Works is responsible for the plan review process.

BMP 6.2.1, Design Standards and Site Plan Review

Revision 0, May 2006

Plans are reviewed in accordance with State requirements.

SOPs: Not applicable.

Available Resources and References:

- Virginia Erosion and Sediment Control Regulations
- Virginia Erosion and Sediment Control Handbook

Recordkeeping and Reporting:

The Department of Public Works will report the following in the MS4 Annual Report:

- Number of Land Disturbance Permits issued, with associated total area of land to be disturbed; and
- Number of erosion and sediment control plans approved, with associated total area of land to be disturbed.
- Monthly reporting to DCR as required.

Schedule of Activities:

The Department of Public Works will continue to require compliance with State requirements and to review site plans and erosion and sediment control plans in accordance with the erosion and sediment control program.

Section 6.2 Design Standards

BMP 6.2.2 Public Facilities Manual

General Description: The Public Facilities Manual details Chesapeake's erosion and sediment control

standards for the construction of all public facilities. The manual can be found

online at:

http://cityofchesapeake.net/services/depart/pub-wrks/engineer-

publicfacilitiesmanual.shtml

BMP Goals and Objectives:

The goal of this BMP is to minimize the impact of land-disturbing activities on receiving waters by requiring that contractors comply with State erosion and

sediment control requirements.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 3.2.1: Public Facilities Manual

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

City Code Chapter 26, Article III: Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which requires "a description of procedures for site planning which incorporate consideration of potential water quality impacts."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(2), which requires "a description of requirements for nonstructural and structural best

management practices."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(4), which requires "a description of appropriate educational and training measures for

construction site operators."

Roles and Responsibilities:

See BMP 3.2.1.

Contact Information: See BMP 3.2.1.

Policies and Procedures:

See BMP 3.2.1.

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SOPs: See BMP 3.2.1.

Available Resources and References:

Virginia Erosion and Sediment Control Regulations

Virginia Erosion and Sediment Control Handbook

Public Facilities Manual

Recordkeeping and See BMP 3.2.1.

Reporting: Schedule of Activities: See BMP 3.2.1.

Section 6.3 Inspection and Enforcement

BMP 6.3.1 Erosion and Sediment Control Program Inspection and Enforcement

General Description: The City of Chesapeake inspects land disturbing activities subject to erosion

and sediment control regulations and implements enforcement actions when

violations are detected.

BMP Goals and Objectives:

The objective of this BMP is for Chesapeake to inspect land disturbing activities subject to erosion and sediment control regulations to require

compliance with the regulations.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: • BMP 6.1.1: Erosion and Sediment Control Program

■ BMP 6.1.2: Erosion and Sediment Control Ordinance

■ BMP 6.4.1: Erosion and Sediment Control Program Tracking

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

City Code Chapter 26, Article III: Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(3), which requires "a description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving

water quality."

Roles and Responsibilities: The Department of Public Works is responsible for performing inspections of land disturbing activities subject to erosion and sediment control requirements.

Contact Information: Questions related to erosion and sediment control program inspection and

enforcement should be directed to:

Director- Department of Public Works

(757) 382-6226

Policies and Procedures:

INSPECTION

Site inspections are performed for projects that disturb 10,000 square feet or more of land area or 2,500 square feet or more of land area in the CBPA. Inspectors ensure proper construction methods and proper installation and maintenance of erosion and sediment controls. Inspection frequency is in accordance with State requirements; however the frequency is greater for those sites that are suspected of having more problems. Inspections are documented

using an Inspection Sheet and are kept on file in the Department of Public

Works.

ENFORCEMENT

Enforcement actions are conducted in accordance with the Erosion and

BMP 6.3.1, Erosion and Sediment Control Inspection and Enforcement Revision 0, May 2006

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Sediment Control Ordinance (BMP 6.1.2). If the inspector determines that the site erosion and sediment controls are not in compliance with the erosion and sediment control plan, a Notice of Non-Compliance is issued. If the problem is not corrected, the inspector may issue a Stop Work Order at the site until the specified corrective measures are taken.

Notices of Non-Compliance and Stop Work Orders are documented and kept on file in the Department of Public Works.

SOPs:

Standard Operation Procedures for Erosion and Sediment Control Inspection and Enforcement are included in Appendix C.

Available Resources and References:

- Inspection Sheet and Notification of Non-compliance (See Appendix C.)
- Stop Work Order (See Appendix C.)
- Virginia Erosion and Sediment Control Regulations
- Virginia Erosion and Sediment Control Handbook

Recordkeeping and Reporting:

Inspectors document inspections using an inspection sheet. Violations are documented using notice of non-compliance or stop work order. Inspection sheets, notices of non-compliance, and stop work orders remain on file in the Department of Public Works. The Department of Public Works will report the following in the MS4 Annual Report:

- Number of projects
- Number of inspections performed
- Number of notices of non-compliance
- Number of stop work orders

Schedule of Activities:

Chesapeake will continue to inspect land disturbing activities subject to erosion and sediment control requirements in accordance with State guidelines throughout the five-year permit period.

Section 6.4 Tracking

BMP 6.4.1 Erosion and Sediment Control Program Tracking

General Description: The City of Chesapeake tracks erosion and sediment control inspections and

violations issued under its erosion and sediment control program.

BMP Goals and

Objectives:

The goal of this BMP is to track inspection activities in the City's erosion and

sediment control program in accordance with State requirements.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

BMP 6.1.1: Erosion and Sediment Control Program
 BMP 6.1.2: Erosion and Sediment Control Ordinance

■ BMP 6.3.1: Erosion and Sediment Control Program Inspections and

Enforcement

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

City Code Chapter 26, Article III: Erosion and Sediment Control

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(3), which requires "a description of procedures for identifying priorities for inspecting

sites and enforcing control measures which consider the nature of the

construction activity, topography, and the characteristics of soils and receiving

water quality."

Roles and

Responsibilities:

The Department of Public Works is responsible for tracking results of erosion

and sediment control inspections and enforcement actions.

Contact Information: Questions related to tracking erosion and sediment control program inspection

should be directed to:

Director- Department of Public Works

(757) 382-6226

Policies and Procedures:

Each inspector personally tracks their inspections and submits them in a

monthly report.

SOPs:

Not applicable.

Available Resources

See BMP 6.3.1

and References:

See BMP 6.3.1

Reporting:

Schedule of Activities:

Recordkeeping and

ActivityScheduleTrack erosion and sediment control inspections and
enforcement actions.Years 1 through 5

City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

Section 6.4 Tracking

BMP 6.4.1 Erosion and Sediment Control Program Tracking

General Description: The City of Chesapeake tracks erosion and sediment control inspections and

violations issued under its erosion and sediment control program.

BMP Goals and

Objectives:

The goal of this BMP is to track inspection activities in the City's erosion and

sediment control program in accordance with State requirements.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

BMP 6.1.1: Erosion and Sediment Control Program
 BMP 6.1.2: Erosion and Sediment Control Ordinance

■ BMP 6.3.1: Erosion and Sediment Control Program Inspections and

Enforcement

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

City Code Chapter 26, Article III: Erosion and Sediment Control

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(3), which requires "a description of procedures for identifying priorities for inspecting

sites and enforcing control measures which consider the nature of the

construction activity, topography, and the characteristics of soils and receiving

water quality."

Roles and

Responsibilities:

The Department of Public Works is responsible for tracking results of erosion

and sediment control inspections and enforcement actions.

Contact Information: Questions related to tracking erosion and sediment control program inspection

should be directed to:

Director- Department of Public Works

(757) 382-6226

Policies and Procedures:

Each inspector personally tracks their inspections and submits them in a

monthly report.

SOPs:

Not applicable.

Available Resources

See BMP 6.3.1

and References:

See BMP 6.3.1

Reporting:

Schedule of Activities:

Recordkeeping and

ActivityScheduleTrack erosion and sediment control inspections and
enforcement actions.Years 1 through 5

City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

Section 6.5 Reporting

BMP 6.5.1 Erosion and Sediment Control Program Reporting

General Description: The City of Chesapeake reports erosion and sediment control program

information to DCR on an annual basis in accordance with State requirements.

BMP Goals and Objectives:

The goal of this BMP is to ensure required information is reported to DCR.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

■ BMP 6.1.1: Erosion and Sediment Control Program

■ BMP 6.3.1: Erosion and Sediment Control Program Inspections and

Enforcement

■ BMP 6.4.1: Erosion and Sediment Control Program Tracking

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

City Code Chapter 26, Article III: Erosion and Sediment Control

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(3), which requires "a description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the

construction activity, topography, and the characteristics of soils and receiving

water quality."

Roles and Responsibilities: The Department of Public Works is responsible for submitting annual reports summarizing results of erosion and sediment control inspections and

enforcement actions to the Department of Conservation and Recreation (DCR).

Contact Information: Questions related to tracking erosion and sediment control program inspection

and enforcement should be directed to:

Director of Public Works

(757) 382-6226

Policies and Procedures:

The Department of Public Works Stormwater Administrator or designee tracks and reports required information to DCR as required. The land disturbance permit information is distributed monthly and the inspections and enforcement

action numbers are submitted annually.

SOPs: Not applicable.

Available Resources

Not applicable.

and References:

Recordkeeping and Reporting:

Chesapeake will continue to track and submit required information to DCR on

a monthly basis. The MS4 Annual Report will include a summary of

BMP 6.5.1, Erosion and Sediment Control Program Reporting

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information as described in BMP 6.3.1.

Schedule of Activities: The Department of Public Works will continue to track and report information to DCR as required by the State throughout the five-year permit period.

Section 6.6 Permit Coordination

BMP 6.6.1 VSMP Permit Coordination

General Description: The City of Chesapeake notifies contractors of their responsibility for obtaining

any required permits.

BMP Goals and

Objectives:

The goal of this BMP is to inform contractors/developers of their obligation to

obtain any required permits.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which

requires "a description of procedures for site planning which incorporate

consideration of potential water quality impacts."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(2), which requires "a description of requirements for nonstructural and structural best

management practices."

Roles and

Responsibilities:

The Department of Public Works is responsible for notifying contractors that

they are responsible for obtaining any required permits.

Contact Information: Questions related to notifying contractors that they are responsible for

obtaining appropriate permits should be directed to:

Engineering Technical Supervisor II

(757) 382-6304

Policies and Procedures:

The Virginia Department of Conservation and Recreation issues VSMP Permits for Construction Activity Stormwater Discharges. Land disturbance permit

applications state that they are required to obtain all necessary State, Federal, and local permits. When they sign a land disturbance permit application they acknowledge that they are responsible for obtaining any other required permits.

SOPs: Not applicable.

Available Resources and References:

Not applicable.

BMP 6.6.1, VSMP Permit Coordination Revision 0, May 2006 Page 6.6.1-1 Recordkeeping and Reporting:

The Department of Public Works files include the land disturbing permits provided by the contractor. This information is available upon request.

Schedule of Activities:

The Department of Public Works will continue to notify developers of their responsibility to obtain required permits through the land disturbing permits

Section 6.7 Municipal Projects

BMP 6.7.1 Compliance with Applicable Erosion and Sediment Control Requirements

General Description: The City of Chesapeake implements measures to ensure that municipal projects

comply with erosion and sediment control requirements.

BMP Goals and

Objectives:

The goal of this BMP is to ensure compliance of municipal projects with erosion and sediment control requirements to reduce the potential for impacts

on receiving waters.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article III: Erosion and Sediment Control

Virginia Erosion and Sediment Control Law

Virginia Erosion and Sediment Control Regulations

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which requires "a description of procedures for site planning which incorporate

consideration of potential water quality impacts."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(2), which requires "a description of requirements for nonstructural and structural best

management practices."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(3), which requires "A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the

construction activity, topography, and the characteristics of receiving water

quality."

Roles and

Responsibilities:

The Department of Public Works is responsible ensuring that municipal

projects comply with erosion and sediment control requirements.

Contact Information: Questions related to erosion and sediment control requirements for municipal

projects should be directed to:

City Engineer

Department of Public Works

(757) 382-8740

Policies and Procedures:

Chesapeake requires that municipal projects are reviewed through the Public Works plan review process. Municipal projects are inspected by the Design

and Construction Services section of Public Works at the same frequency as

private projects.

SOPs: Not applicable.

BMP 6.7.1, Compliance with Applicable E&S Control Requirements

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Available Resources and References:

Not applicable.

Recordkeeping and Reporting:

Records of site plan review and site inspections remain on file in the Department of Public Works and are available upon request. The MS4 Annual

Report will document the number of plans reviewed and the total number of

erosion and sediment control inspections performed.

Schedule of Activities: The Department of Public Works will continue to require municipal projects to

comply with applicable erosion and sediment control practices by providing

plan review and construction inspections.

Section 7.1 Planning and Development

BMP 7.1.1 Chesapeake Bay Preservation Area Overlay District

General Description: The City of Chesapeake has implemented a Chesapeake Bay Preservation Area

Overlay District to implement the requirements of the Virginia Chesapeake Bay

Preservation Act.

BMP Goals and Objectives:

The Chesapeake Bay Preservation Area Overlay District imposes stormwater management requirements on new development and redevelopment projects

within the Chesapeake Bay watershed.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: 9 VAC 10-20 et seq. (The Chesapeake Bay Preservation Area Designation and Management Regulations)

• 9 VAC Sections 10.1-2100, et seq., (The Chesapeake Bay Preservation

Act)

■ 15.1-489, of the Code of Virginia.

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

This BMP also addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(D)(1), which requires "A description of procedures for site planning which incorporate consideration of potential water quality impacts."

Roles and Responsibilities:

The Planning Department reviews CBPA applications. The city manager designates an enforcement agent ("city manager's designee") to enforce the provisions of this ordinance.

Contact Information: Questions related to the Chesapeake Bay Preservation Area Ordinance should

be directed to:

Director

Department of Planning

(757) 382-6176

Policies and Procedures:

The Chesapeake Bay Preservation Area (CBPA) Ordinance is intended to protect and improve the water quality of the bay, its tributaries, buffer areas and other state waters, by minimizing the potential adverse effects of human activity upon these areas. These provisions are intended to encourage and

BMP 7.1.1, Chesapeake Bay Preservation Area Ordinance Revision 0, May 2006

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promote:

- Protection of existing high-quality state waters and restoration of all
 other state waters to a condition or quality that will permit all
 reasonable public uses and will support the propagation and growth of
 all aquatic life, including but not limited to, game fish, which might
 reasonably be expected to inhabit them;
- Safeguarding the clean water of the state from pollution;
- Prevention of any increase in pollution;
- Reduction of existing pollution; and
- Promotion of water resource conservation in order to provide for the health, safety and welfare of the present and future citizens of the city and region.

General performance standards for land disturbance, development and redevelopment in the CBPA district are as follows:

- Limitations on land disturbance. In order to meet the CBLAB regulations, land disturbance shall be limited to the area necessary to provide for the proposed use, building, structure or development, as determined by the appropriate approval authority.
- *Preservation of existing vegetation*. Existing vegetation shall be preserved in the CBPA district to the maximum extent practicable.
- Canopy requirements. In order to meet CBLAB requirements for a woody vegetated 100-foot wide RPA buffer and to satisfy CBLAB general performance standards for the RMA.
- Limitation on impervious covers. All land disturbance, development and redevelopment shall minimize impervious cover so as to promote infiltration of stormwater into the ground. Techniques for minimizing impervious cover and implementing low impact design are included in the CBPA Specifications Manual.
- On-site sewage treatment system requirements.
- Stormwater runoff requirements.
- RPA buffer area requirements.

All land disturbance, development and redevelopment in the IDA is subject to approval by the city manager's designee for developments within the RMA and by the CBPA review committee for developments, or portions thereof, encroaching in the RPA, in accordance with the following:

- All performance standards in section 26-520 apply to the IDA, except that 100-foot buffer requirements may be modified or waived as set out in the ordinance.
- Wherever possible, a full 100-foot buffer area shall be retained or established with a minimum tree canopy coverage of 20 percent, calculated in accordance with the CBPA specifications manual. Where preservation or establishment of the full 100-foot buffer is determined by the CBPA review committee to be impracticable in the IDA, all land disturbance, development and redevelopment in the IDA shall incorporate the design standards set out in the CBPA specifications manual.
- Techniques for low impact design set out in the CBPA specifications manual are followed unless waived or modified by the city manager's

designee or for RPA encroachment, by the CBPA review committee.

The ordinance also lists provisions for exemptions, variances, appeals, and penalties for violations.

SOPs: Not applicable.

Available Resources and References:

- City Code Chapter 26, Article X: Chesapeake Bay Preservation Area District (See Appendix B).
- CBPA Review Committee Application (See Appendix C).
- CBPA Exception Application (See Appendix C).
- CBPA Appeal Application (See Appendix C).

Recordkeeping and Reporting:

The Chesapeake Bay Preservation Area Ordinance will remain available on: www.municode.com. Any changes to City Code Chapter 26 will be documented in the MS4 Annual Report.

Schedule of Activities:

The Department of Planning will continue to review applications and the city manager's designee will continue to enforce the Chesapeake Bay Preservation Area Overlay District Ordinance throughout the five-year permit period.

Section 7.1 Planning and Development

BMP 7.1.2 Landscaping Requirements in New Development

General The City of Chesapeake has specific requirements for landscaping in areas of new

Description: development.

BMP Goals and Objectives:

The goal of this BMP is to preserve open space in areas of development or

redevelopment, which is generally expected to reduce the impact of development on

water quality.

Reference

To be completed later.

Section of

VPDES Permit:

Related

Not applicable.

Authority:

Activities:

- Chesapeake Landscaping Ordinance (Sec 19-600 of the Chesapeake Zoning Ordinance)
- Chesapeake Landscape Specifications Manual
- Code of Virginia Chapter 13 of Title 28.2
- Code of Virginia, Title 15.1-486 et seq.

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and Responsibilities:

The Neighborhood Services Department is responsible for administering the City's Landscaping Ordinance.

Contact Information: Questions regarding landscaping requirements for new developments should be directed to:

City Arborist

Neighborhood Services Department

(757) 382-6531

Policies and Procedures:

The intent of the Chesapeake Landscaping Ordinance is to provide minimum standards for preservation, protection and enhancement of the ecologic and aesthetic environment of the City of Chesapeake. The Landscape Ordinance provides requirements for the inclusion of landscape plans with each subdivision, preliminary, or final site plan submitted to the City for approval. The Ordinance provides minimum standards for buffer yards between uses, tree canopy coverage, and open space within parking areas. The Chesapeake Landscape Specifications Manual acts as

a guide for implementing the Chesapeake Landscape Ordinance.

BMP 7.1.2, Landscaping Requirements in New Development Revision 0, May 2006

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SOPs: Not applicable.

Available Resources and References:

- Chesapeake Landscaping Ordinance (Sec 19-600 of the Chesapeake Zoning Ordinance)
- Chesapeake Landscape Specifications Manual

Both are available online at:

 $\underline{http://cityofchesapeake.net/services/depart/neighborhood/environ_rental/landscape_tr}$

ees.shtml

Recordkeeping and Reporting:

Any changes to the Chesapeake Landscaping Ordinance or the Chesapeake Landscape Specifications Manual that have the potential to impact stormwater will be

documented in the MS4 Annual Report.

Schedule of Activities:

The Neighborhood Services Department will continue to enforce the landscaping provisions in the Chesapeake Landscaping Ordinance and the Chesapeake Landscape

Specifications Manual throughout the five-year permit period.

Section 7.2 Design and Plan Review

BMP 7.2.1 Water Quality Requirements and Plan Review

General Description: The City of Chesapeake requires stormwater management practices for water

quality within the entire City. DCR's Stormwater Management Handbook is used as the basis of design for stormwater facilities. The City implements water quality requirements City-wide per the adopted Stormwater Management

Ordinance.

BMP Goals and Objectives:

The purpose of water quality stormwater management requirements is to reduce the impacts of new development or redevelopment on receiving waters.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 7.1.1: Chesapeake Bay Preservation Area Overlay District

 City Code Chapter 26, Article X: Chesapeake Bay Preservation Area Overlay District (See Appendix B).

Virginia Stormwater Management Regulations

Applicable Federal Regulation:

Authority:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and Responsibilities: The Planning Department is responsible for administering the City's Chesapeake Bay Preservation Area Overlay District, as discussed in BMP 7.1.1.

The Department of Public Works is responsible for coordinating all plan reviews.

The Department of Public Works will be responsible for implementation of the State stormwater program and associated water quality requirements when they take effect.

Contact Information:

Questions regarding implementation of the State stormwater program should be directed to:

Stormwater Administrator Department of Public Works (757) 382-3321

Policies and Procedures:

City Code Chapter 26, Article X, the Chesapeake Bay Preservation Area District, establishes water quality requirements for new development or redevelopment in the District (See BMP 7.1.1).

Policies for Plan Review and checklists are available in the Public Facilities Manual.

The City requires compliance with the Virginia Stormwater Management Handbook as the basis of design for stormwater management facilities.

The State of Virginia is expected to finalize code regarding municipal stormwater management programs. When State code is finalized, Chesapeake will adopt the state stormwater management program. The City will require BMPs associated with new development and redevelopment to address water quality City-wide upon adoption of the State stormwater management program. The Department of Public Works will be responsible for implementing the State stormwater management program.

SOPs: Not applicable.

Available Resources and References:

Virginia Stormwater Management Handbook (DCR)

Recordkeeping and Reporting:

Once State code is finalized, the City's progress in adopting the State stormwater management program will be documented in the MS4 Annual Report.

Schedule of Activities:

The City of Chesapeake will continue to use the Stormwater Management Handbook as the basis for design for stormwater management facilities and will adopt the State stormwater management program in accordance with State requirements.

Section 7.2 Design and Plan Review

BMP 7.2.2 Public Facilities Manual

General Description: The Public Facilities Manual includes a chapter on water quality that includes

acceptable BMPs and design criteria. The manual can be found online at:

http://cityofchesapeake.net/services/depart/pub-wrks/engineer-

publicfacilitiesmanual.shtml

BMP Goals and

Objectives:

The objective of this BMP is to provide developers and engineers with information regarding post-construction water quantity and quality

requirements within the City of Chesapeake.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 7.2.1

BMP 3.2.1

Authority: See BMP 3.2.1.

Applicable Federal

Regulation:

See BMP 3.2.1.

Roles and

See BMP 3.2.1.

Responsibilities:

Contact Information: See BMP 3.2.1.

Policies and

See BMP 3.2.1.

Procedures:

SOPs: See BMP 3.2.1.

Available Resources

and References:

See BMP 3.2.1.

Recordkeeping and

Reporting:

See BMP 3.2.1.

Schedule of Activities: See BMP 3.2.1.

Section 7.3 Maintenance Inspection and Compliance

BMP 7.3.1 Inspections of Public BMPs

General Description: The City of Chesapeake has a program in place to routinely inspect public

BMPs.

BMP Goals and

Objectives:

The objective of this BMP is to regularly inspect public BMPs to ensure that necessary maintenance is performed in order to better protect water quality.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

Not applicable.

Authority:

City Code Chapter 26, Article X: Chesapeake Bay Preservation Area District City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and Responsibilities: The Department of Public Works Division of Stormwater Management is responsible for the program to regularly inspect public BMPs.

Contact Information:

Questions regarding the public BMP inspection program should be directed to:

Stormwater Administrator Department of Public Works

(757) 382-3321

Policies and Procedures:

The Department of Public Works Stormwater Administrator oversees the program to regularly inspect public BMPs. The program includes a list of BMPs to be inspected and an evaluation form. Public BMPs are inspected annually.

SOPs: Not Applicable.

Available Resources and **References**:

- The Detention Lake Evaluation Form is Included in Appendix C.
- Virginia Stormwater Management Handbook (DCR)

Recordkeeping and Reporting:

The Department of Public Works will document the number of inspections performed annually, as well as any significant findings in the MS4 Annual Report.

Activity	Schedule
Inspect public BMPs annually.	Years 1 through 5

Section 7.3 Maintenance Inspection and Compliance

BMP 7.3.2 Random Inspections of Private BMPs

General Description: The City of Chesapeake will develop a program to randomly inspect private

BMPs.

BMP Goals and

Objectives:

The objective of this BMP is to randomly inspect private BMPs to ensure that necessary maintenance is performed in order to better protect water quality.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

Not applicable.

Authority:

City Code Chapter 26, Article X: Chesapeake Bay Preservation Area District City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and Responsibilities: The Department of Public Works Division of Stormwater Management is responsible for the development of the program to randomly inspect private BMPs.

Contact Information:

Questions regarding the private BMP inspection program should be directed to:

Stormwater Administrator Department of Public Works

(757) 382-3321

Policies and Procedures:

The Department of Public Works Stormwater Administrator will oversee the program to randomly inspect private BMPs.

SOPs:

When developed the program will include a written policy and SOPs for

performing inspections.

Available Resources and References:

- The current Private BMP Inspection Form is included in Appendix C.
- Virginia Stormwater Management Handbook (DCR)

Recordkeeping and Reporting:

The Department of Public Works will document progress in the development of a private BMP inspection program in the MS4 Annual Report. Once inspections begin, the MS4 Annual Report will include the number of inspections performed annually, as well as any significant findings.

Activity	Schedule
Develop a program, including a written policy and	Year 5
SOPs, for random inspection of private BMPs.	

Section 7.3 Maintenance Inspection and Compliance

BMP 7.3.3 Maintenance Agreement with Private BMP Owners

General Description: The City of Chesapeake requires that owners of private BMPs sign an

agreement to maintain their BMPs.

BMP Goals and

Objectives:

The objective of this BMP is to require private BMP owners to perform necessary maintenance as needed at their own expense, with the goal of

keeping private BMPs in a well-maintained condition.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article X: Chesapeake Bay Preservation Area Overlay

District

City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and Responsibilities: The Department of Public Works is responsible for providing private BMP owners with the maintenance agreement and for ensuring that it is filed in the Stormwater Management Division, and recorded with the deed in the Courthouse.

Contact Information:

Questions regarding the private BMP maintenance agreement should be

directed to:

Stormwater Administrator Department of Public Works

(757) 382-3321

Policies and Procedures:

The Department of Public Works requires that private BMP owners sign a private BMP maintenance agreement before the land disturbance permit can be issued. Maintenance agreements are kept on file in the Stormwater Management Division and are also recorded with the deed in the Courthouse.

SOPs: Not applicable.

Available Resources and References:

A copy of the maintenance agreement is included in Appendix C.

Recordkeeping and Reporting:

Signed maintenance agreements are kept on file in the Stormwater Management Division. If changes are made to the maintenance agreement document, the changes will be documented in the MS4 Annual Report for the year in which changes are approved.

Activity	Schedule
Continue to require BMP maintenance agreement for	Years 1 through 5
privately owned BMPs.	

Section 7.3 Maintenance Inspection and Compliance

BMP 7.3.4 BMP Database

General Description: The City of Chesapeake maintains a database of public BMPs.

BMP Goals and Objectives:

The objective of this BMP is to provide a database to track information

regarding public BMPs within the City.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article X: Chesapeake Bay Preservation Area Overlay

District

City Code Chapter 26, Article V11I: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(2), which requires "A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Roles and Responsibilities: The Department of Public Works Division of Stormwater Management is responsible for maintaining the BMP database.

Contact Information: Questions regarding the BMP database should be directed to:

Stormwater Administrator Department of Public Works

(757) 382-3321

Policies and Procedures:

The BMP database is maintained in GIS by the Department of Public Works. The database includes information regarding public BMPs, including design surface area, capacity, depth, etc.

SOPs: Not applicable.

Available Resources and References:

BMP database

Recordkeeping and Reporting:

The BMP database is maintained by the Department of Public Works.

Activity	Schedule
Continue to maintain the BMP database.	Years 1 through 5
Continue to enter new BMPs into the database at the	Years 1 through 5
time of bond release and facility acceptance for City	
maintenance.	

Section 8.1 Roadway Source Prevention

BMP 8.1.1 Street Sweeping

General Description: The Department of Public Works Streets and Highway Division performs street

sweeping operations in the City of Chesapeake.

BMP Goals and

Objectives:

The objective of this BMP is to remove debris from roadways and thereby

prevent its discharge to the MS4.

Reference Section of

VPDES Permit:

To be completed later.

Not applicable. **Related Activities:**

Authority: City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal

Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(3), which requires "A description of practices for operating and maintaining public

streets, roads, and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including

pollutants discharged as a result of deicing activities."

Roles and

Responsibilities:

The Department of Public Works Streets and Highway Division is responsible

for street sweeping operations.

Contact Information: Questions related to street sweeping should be directed to:

Streets Administrator

Streets and Highway Division

(757) 382-3305

Policies and

Procedures:

City roadways constructed with curb and gutter are swept four times per year.

These streets are also swept after City sponsored events as requested by the City Managers Office and after deicing of bridges and overpasses.

Debris from sweeping operations is taken to an authorized landfill by

intermediate covered dump truck.

SOPs: Not applicable.

Available Resources and References:

Department of Public Works Street Sweeping Regulation is included in

Appendix C.

Recordkeeping and

The pounds of pollutants removed are reported yearly in the MS4 Annual

Reporting:

Report.

Activity	Schedule
Sweep curb and gutter streets four times per year, and	Years 1 through 5
haul debris daily as needed.	
Sweep and haul debris after City events as requested by	Years 1 through 5
the City Manager's Office.	

Section 8.1 Roadway Source Prevention

BMP 8.1.2 Salt Storage

General Description: The Department of Public Works Streets and Highway Division maintains

calibrated spreaders for deicing materials and practices good housekeeping measures to minimize potential pollution from the deicing material storage site.

BMP Goals and

Objectives:

The purpose of this BMP is to reduce the impacts on receiving waters from

pollutants associated with storage of materials.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(3), which requires "A description of practices for operating and maintaining public streets, roads, and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of deicing activities."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(4), which requires "A description of procedures to prevent, contain, and respond to spills

that may discharge into the municipal separate storm sewer."

Roles and Responsibilities: The Department of Public Works Streets and Highway Division is responsible for maintaining deicing equipment, applying deicing materials, and maintaining the deicing material storage facilities.

Contact Information: Questions related to deicing materials should be directed to:

Streets Administrator

Streets and Highway Division

(757) 382-3305

Policies and Procedures:

Although snow and ice control is not a major operation for the City, the Department of Public Works Streets and Highway Division maintains stockpiles of salt/sand mixtures. In order to minimize potential pollution from the storage site, the salt/sand mixture is stored under cover using tarps. The storage sites for the deicing materials are located in three City maintenance yards: Butts Station, Bowers Hill, and Hickory. In addition all three yard have liquid deicing equipment. This equipment allows for the production of a 25 to 30 percent brine solution, which is used 24 to 48 hours prior to and during a snow or ice event. The deicing solution is only used on bridges and overpasses.

SOPs: Not applicable.

BMP 8.1.2, Salt Storage Revision 0, May 2006 Page 8.1.2-1 Available Resources and References:

Not applicable.

Recordkeeping and Reporting:

The Department of Public Works Streets and Highway Division documents the quantity of sodium chloride and sand mix abrasives used each year and will

report the annual tons used in the MS4 Annual Report.

Schedule of Activities: Deicing operations occur on an as-needed basis.

Section 8.2 Municipal Operation Centers Source Prevention

BMP 8.2.1 Quarterly Inspections of City Yards

General Description: The City of Chesapeake inspects City yards to ensure environmental

compliance and good housekeeping.

BMP Goals and

Objectives:

The purpose of this BMP is to implement a program to ensure that good housekeeping practices are used at City maintenance yards in order to reduce

the potential for impacting stormwater runoff to the MS4.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP Addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

Roles and Responsibilities: The Department of Public Works is responsible for the City maintenance and outdoor storage yard inspection program.

Contact Information: Questions related to inspections of City yards should be directed to:

Stormwater Administrator Department of Public Works

(757) 382-3321

OR

Environmental Quality Coordinator Fire Marshal's Office (757) 382-6803

Policies and Procedures:

The City inspects each yard annually using the City Environmental Yard Inspection form. Copies of the forms are forwarded to the point of contact for that yard and are also filed in the Division of Stormwater Management and with the Environmental Quality Coordinator.

Yards currently inspected include:

- Butts Station (Public Works Yard, Fuel Site)
- Bowers Hill (Public Works Yard, Fuel Site)
- Hickory (Public Works Yard)
- Holowell Lane
- Waste Management Division

- Jordan Bridge
- Chesapeake Expressway
- Northwest River WTP
- South Norfolk (Mosquito Control)
- Western Branch (Mosquito Control, Fuel Site)
- Deep Creek (Mosquito Control)
- Mann Drive (Parks and Recreation, General Services)
- City Garage
- Albermarle Drive (Fuel Site)
- Greenbriar Parkway (Mosquito Control)
- Portlock (Mosquito Control)
- St. Brides (Fuel Site)
- Fire Station #1 (Fuel Site)
- Fire Station #2 (Fuel Site)

SOPs: Not applicable.

Available Resources and References:

City of Chesapeake Environmental Yard Inspection form is provided in Appendix C of this MS4 Plan.

Recordkeeping and Reporting:

The Department of Public Works maintains inspection reports on file in the Division of Stormwater Management and with the Environmental Quality Coordinator. The Department of Public Works documents the number of inspections performed in each MS4 Annual Report.

Activity	Schedule
Inspect City yards on a quarterly basis using checklist	Years 1 − 5
Evaluate City properties to determine if additional	Year 1
facilities require inspections.	

Section 8.3 Source Prevention at Other Facilities

BMP 8.3.1 Schools

General Description: The City of Chesapeake and the Chesapeake School Board have entered into an

> agreement for the purpose of impounding and/or treating stormwater runoff on Chesapeake school property and inspecting BMPs at City of Chesapeake

Schools.

BMP Goals and **Objectives:**

The goal of this BMP is to ensure school properties follow good housekeeping

procedures, and maintain their BMPs.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Chapter 26, Article VIII: Storm Water Management **Authority:**

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will included, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-or-ways and at municipal facilities."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

Roles and **Responsibilities:** The Stormwater Management Division inspects BMPs on school property annually and reports any maintenance needs to the School Board. The School Board is responsible for any maintenance or repairs needed, including the cost

of the repairs.

Contact Information: Questions related to source prevention at school properties should be directed

to:

Chesapeake Pubic Schools Department of New Construction (757) 547-0013

OR

Stormwater Administrator Department of Public Works

(757) 382-3321

Policies andBy this agreement the City of Chesapeake agrees to accept the Chesapeake Procedures:
Public Schools facilities and operations as part of its VPDES Permit. The City

Public Schools facilities and operations as part of its VPDES Permit. The City inspects stormwater management facilities on Chesapeake school properties

annually.

SOPs: Not applicable.

Available Resources and References:

The Memorandum of Agreement can be found in Appendix D of this MS4

Plan.

Recordkeeping and Reporting:

The Memorandum of Agreement and the School System's Stormwater Management Reports are kept on file in the Division of Stormwater

Management.

Activity	Schedule
Maintain memorandum of agreement with Chesapeake	Years 1 through 5
School Board	_

Section 8.3 Source Prevention at Other Facilities

BMP 8.3.2 Environmental Management Systems

General Description: The City of Chesapeake is developing a comprehensive Environmental

Management System (EMS) for the City garage.

BMP Goals and

Objectives:

The goal of this BMP is to reduce the potential for pollution of receiving

waters.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

Roles and

Responsibilities:

The Department of General Services, Central Fleet Management Division and the Environmental Quality Coordinator are responsible for the environmental

management system.

Questions related to the environmental management system should be directed **Contact Information:**

Fleet Service Specialist/Safety

Central Fleet Management Division – General Services

(757) 382-6803

OR

Environmental Quality Coordinator

Fire Marshal's Office (757) 382-6803

Policies and **Procedures:** The City of Chesapeake has demonstrated their commitment to the Environment by developing an Environmental Management System with an overall goal of pollution prevention. Through a process of continuous

improvement the EMS will:

Ensure that Central Fleet meets or exceeds applicable State and Federal regulatory requirements;

BMP 8.3.2, Environmental Management Systems

Revision 0, May 2006

- Establish programs and practices that minimize the production of hazardous and solid waste, conserve resources, and focus on pollution prevention;
- Provide an annual review of Central Fleet's operations and programs;
- Maintain an environmental Emergency Response Plan to effectively address potential incidents;
- Provide for communication and environmental training for all employees to increase awareness and improve environmental performance; and
- Communicate Central Fleet's commitment to protecting the environment through a comprehensive EMS to other City departments and the citizens of the City of Chesapeake.

The Central Fleet Management Division concentrates on the following significant aspects at the City Garage:

- Prevent gas and diesel fuel releases to the environment.
- Prevent spills around the shop area.
- Prevent greenhouse gas emissions from City vehicles.

The Central Fleet Management Division also provides the following pollution prevention initiatives:

- Biodiesel Pilot Program to improve air quality
- Parts Washers improved to change to non-hazardous solvents.
- Preventive Maintenance Service Interval Study- Oil changes will be performed every 5000 miles instead of every 3000 miles, once this study is complete, which will save natural resources.
- Solid Waste Reduction refillable sprayers are used which reduces disposal of aerosol cans.
- Refrigerant Recovery and recycling all who handle refrigerants are ASE certified.
- Used Oil and Gasoline Segregation to avoid hazardous mixing.

The Central Fleet Management Division also provides a pollution prevention program that recycles or properly disposes of used oil and antifreeze; used cleaning solvents; scrap metal; speedy dry soaked with oil; used oil and oil filters; and tires.

The Central Fleet Management Division has been accepted into the DEQ Virginia Environmental Excellence Program as an Environmental Enterprise ("E2") Facility.

The City will proceed with the development of EMS at other facilities.

SOPs: Not Applicable.

Available Resources and References:

- City of Chesapeake Central Fleet Environmental Policy Statement (See Appendix C).
- City of Chesapeake Central Fleet Management Emergency Action Plan (See Appendix C).
- City of Chesapeake Central Fleet Pollution Prevention Program (See Appendix C).

Recordkeeping and Reporting:

The City of Chesapeake will continue implementation of the EMS and will create program manuals or other documentation of the programs implemented. The City will explore options for implementing the EMS at additional City facilities.

The Department of General Services, Central Fleet Management Division will continue implementation of the EMS at the City garage. This documentation will be kept on file in the Department of General Services, Central Fleet Management Division and with the Environmental Quality Coordinator.

Ī	Activity	Schedule
	The City will document the status of the EMS.	Years 1 and 3

Section 8.3 Source Prevention at Other Facilities

BMP 8.3.3 UST Compliance Program

General Description: The City of Chesapeake maintains an Underground Storage Tank (UST)

Compliance Program for City-owned tanks.

BMP Goals and Objectives:

The goal of this BMP is to reduce the potential for petroleum releases and for

the pollution of receiving waters.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: • City Code Chapter 26, Article VIII: Stormwater Management

 9VAC 25-580 (Virginia Code Chapter 580 Parts I – VIII), Underground Storage Tank (UST) Regulations

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(4), which requires "A description of procedures to prevent, contain, and respond to spills that may discharge into the municipal separate storm sewer."

This BMP also addresses RCRA Subtitle 1 – Underground Storage Tank Program, and Energy Policy Act of 2005, Title XV, Subtitle B.

Roles and Responsibilities:

At each facility, a contact person is assigned responsibility for addressing all safety issues within that specific City of Chesapeake facility.

Contact Information: Questions related to the UST Compliance Program should be directed to:

Environmental Quality Coordinator Fire Marshal's Office (757) 382-6803

Policies and Procedures:

The City of Chesapeake is committed to oil spill prevention by providing the equipment, personnel training and assistance required to prevent and control the discharge of any petroleum into the MS4.

Activities include:

- Update maps.
- Implement physical means to prevent discharge to the MS4.
- Review management procedures to reduce likelihood of spills.
- Identify petroleum products handled.
- Identify potential sources of petroleum spills.
- Review adequacy of response to past spills.
- Check for leak detection, corrosion protection and spill/overflow prevention devices.
- Establish and adhere to spill reporting procedures, including notification or proper authorities.

- Complete regularly scheduled inspections.
- Coordinate and execute spill cleanups.
- Implement appropriate changes to spill response procedures.
- Establish training/educational programs focusing on spill prevention and response.

The SPCC Plan includes: inventory of tanks; fuel transfer operations; tank inspections; tank records; fuel deliveries; reports of petroleum discharges; spill prevention response maps containing surface drainage flows and the storm sewer system; general spill response procedures; location and list of spill response equipment; discharge reporting; training procedures; and spill response notifications.

SOPs:

Not Applicable.

Available Resources and References:

- City of Chesapeake Petroleum Spill Prevention, Control, and Countermeasures (SPCC) Plan, May 2002/Revised Dec 2005 is included in BMP 5.6.1 (See Appendix C).
- City of Chesapeake UST Inspection Checklist (See Appendix C).

Recordkeeping and Reporting:

The City of Chesapeake will continue to inspect City-owned USTs quarterly using the UST Inspection Checklist and SPCC Plan.

Activity	Schedule
Quarterly inspections of City-owned USTs	Years 1 through 5

Section 8.3 Source Prevention at Other Facilities

BMP 8.3.4 AST Compliance Program

General Description: The City of Chesapeake will develop an Above Ground Storage Tank (AST)

Compliance Program for City-owned tanks.

BMP Goals and

Objectives:

The goal of this BMP is to help to prevent petroleum spills and reduce the

potential for the pollution of receiving waters.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

Not applicable.

Authority:

City Code Chapter 26, Article VIII: Stormwater Management

• 9VAC 25-91-10, Facility and Aboveground Storage Tank (AST)

Regulation

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(4), which requires "A description of procedures to prevent, contain, and respond to spills

that may discharge into the municipal separate storm sewer."

Roles and Responsibilities:

At each facility, a contact person is assigned responsibility for addressing all

safety issues within that specific City of Chesapeake facility.

Contact Information:

Questions related to the AST Compliance Program should be directed to:

Environmental Quality Coordinator

Fire Marshal's Office (757) 382-6803

Policies and Procedures:

The City of Chesapeake is committed to oil spill prevention by providing the equipment, personnel training and assistance required to prevent and control the discharge of any petroleum into the MS4.

Activities include:

- Update maps.
- Implement physical means to prevent discharge to the MS4.
- Review management procedures to reduce likelihood of spills.
- Identify petroleum products handled.
- Identify potential sources of petroleum spills.
- Review adequacy of response to past spills.
- Check for leak detection, corrosion protection and spill/overflow prevention devices.
- Establish and adhere to spill reporting procedures, including notification or proper authorities.
- Complete regularly scheduled inspections.
- Coordinate and execute spill cleanups.
- Implement appropriate changes to spill response procedures.

• Establish training/educational programs focusing on spill prevention and response.

The SPCC Plan includes: inventory of tanks; fuel transfer operations; tank inspections; tank records; fuel deliveries; reports of petroleum discharges; spill prevention response maps containing surface drainage flows and the storm sewer system; general spill response procedures; location and list of spill response equipment; discharge reporting; training procedures; and spill response notifications.

SOPs:

Not Applicable.

Available Resources and References:

• City of Chesapeake Petroleum Spill Prevention, Control, and Countermeasures (SPCC) Plan, May 2002/Revised Dec 2005 is attached to BMP 5.6.1.

Recordkeeping and Reporting:

The City of Chesapeake will review the condition of City-owned ASTs and correct deficiencies and then develop a checklist for inspections. Once the checklist is developed, Chesapeake will inspect the City-owned ASTs quarterly using the AST Inspection Checklist and the SPCC Plan.

Activity	Schedule
Review condition of City-owned ASTs and correct	Year 1
deficiencies.	
Develop checklist for City-owned AST inspections.	Year 2
Regular inspections of City-owned ASTs.	Years 2 through 5

Section 8.4 Source Prevention of Pesticides, Herbicides, and Fertilizers

BMP 8.4.1 Required Certification of City Employees

General Description: The City of Chesapeake requires certification of City employees responsible for

the application of pesticides, herbicides, and fertilizers to City property.

BMP Goals and

Objectives:

The goal of this BMP is to promote proper use of the chemicals on City

property in order to reduce the potential for discharge of pollutants to the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

BMP 8.4.2 discusses requirements for vendors.

Authority:

Virginia Pesticide Control Act, 2 VAC 20-51

Virginia Department of Agriculture and Consumer Services

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will included, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-or-ways and at municipal facilities."

Roles and Responsibilities:

The Mosquito Control Department is responsible for the application of pesticides and the General Services and Parks and Recreation Departments are responsible for the application of herbicides, and fertilizers to City property.

Contact Information:

Questions related to certification requirements for city employees applying pesticides, herbicides, and fertilizers should be directed to:

Operations Director

Mosquito Control Department

(757) 382-3459

Grounds Maintenance Coordinator Department of General Services

(757) 382-6559

Policies and Procedures:

The City of Chesapeake requires City employees who apply pesticides and

herbicides to be properly certified.

SOPs: Not applicable.

Available Resources and References:

Chesapeake Mosquito Control Spill Control Response (See Appendix C).

Recordkeeping and Reporting:

The Stormwater Management Division reports the number of certified technicians and applicators in the MS4 Annual Report.

Schedule of Activities:

The City will continue to require that employees who apply pesticides and herbicides be properly certified by the State. The number of employees certified will continue to be reported in the MS4 Annual Report.

Section 8.4 Source Prevention of Pesticides, Herbicides, and Fertilizers

BMP 8.4.2 Requirements for Vendors

General Description: The City of Chesapeake requires certification for contractors who apply

pesticides, herbicides, and fertilizers to City property.

BMP Goals and

Objectives:

The goal of this BMP is to promote proper use of the chemicals on City

property in order to reduce the potential for discharge of pollutants to the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

BMP 8.4.1 discusses requirements for City employees.

Authority:

Virginia Pesticide Control Act, 2 VAC 20-51

Virginia Department of Agriculture and Consumer Services

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(6), which requires "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will included, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-or-ways and at municipal facilities."

Roles and Responsibilities:

The Mosquito Control Department is responsible for the application of pesticides and the Department of Parks and Recreation is responsible for the application of herbicides, and fertilizers to City property.

Contact Information:

Questions related to certification requirements for vendors applying pesticides, herbicides, and fertilizers should be directed to:

Operations Director

Mosquito Control Department

(757) 382-3459

Grounds Maintenance Coordinator Department of General Services

(757) 382-6559

Policies and Procedures:

The City of Chesapeake requires individuals applying pesticides and herbicides to City property to be licensed commercial pesticide applicators or registered technicians working under the supervision of a commercial applicator. The City's maintenance contracts require the vendor to hold a valid pesticide business license and employ licensed applicators to apply pesticides.

SOPs: Not applicable.

Available Resources and References:

Not applicable.

Recordkeeping and Reporting:

Contracts and lists of vendors are on file at the Department of Mosquito

Control.

Schedule of Activities: The City will continue to require certification for vendors that apply pesticides,

herbicides, and fertilizers to City property throughout the permit period.

Section 8.5 Employee Training for Source Prevention

BMP 8.5.1 Stormwater Pollution Prevention Training for Selected Employees

General Description: The City of Chesapeake trains selected employees regarding stormwater-related

issues.

BMP Goals and

Objectives:

The goal providing stormwater-related training to employees is to inform them of proper practices to reduce the potential of pollutants entering the MS4.

Reference Section of VPDES Permit:

To be completed later.

Related Activities:

Not applicable.

Authority:

City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(1), which requires "A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system...."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(5), which requires "A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers."

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(B)(6), which requires "A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

Roles and **Responsibilities:** The Department of Public Works Division of Stormwater Management and the Environmental Quality Coordinator are responsible for providing stormwaterrelated training for selected employees.

Contact Information:

Questions related to stormwater-related training for City employees should be directed to:

Stormwater Administrator Department of Public Works

(757) 382-3321

Environmental Quality Coordinator

Fire Marshal's Office (757) 382-6803

Policies and **Procedures:** Training regarding stormwater-related topics is provided for selected City employees on an as-needed basis. Training may focus on illicit discharges and teaching employees to recognize and report illicit discharges, erosion and

BMP 8.5.1, Stormwater Pollution Prevention Training for Selected Employees Revision 0, May 2006

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City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

sediment control, spills, or on other stormwater-related subjects. An annual chemical spill prevention and Hazwoper class is offered to Operations employees through the Department of Public Works.

SOPs: Not applicable.

Available Resources and References:

Not applicable.

Recordkeeping and Reporting:

The Department of Public Works Division of Stormwater Management and the Environmental Quality Coordinator are responsible for providing stormwater-related training for selected employees. The topic provided and the number of attendees in the preceding year will be documented in each MS4 Annual Report.

Schedule of Activities: Training will be conducted for various departments and employees on an as-

needed basis. Chemical spill prevention and Hazwoper class is offered to Operations employees through the Department of Public Works annually.

Section 8.5 Employee Training for Source Prevention

BMP 8.5.2 HR STORM

General Description: The City of Chesapeake participates in HR STORM, a regional stormwater

education initiative coordinated by the Hampton Roads Planning District

Commission (HRPDC).

BMP Goals and Objectives:

Chesapeake participates in HR STORM to provide stormwater-related education to its residents, businesses, and industry, with the goal of reducing

the discharge of pollutants to the MS4. HR STORM provides annual

stormwater-related training to City employees.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: See BMP 3.1.1, "HR STORM."

Authority: See BMP 3.1.1.

Applicable Federal

Regulation:

See BMP 3.1.1.

Roles and

Responsibilities:

See BMP 3.1.1.

Contact Information:

See BMP 3.1.1.

Policies and

See BMP 3.1.1.

Procedures:

SOPs: See BMP 3.1.1.

Available Resources

and References:

See BMP 3.1.1.

Recordkeeping and

Reporting:

See BMP 3.1.1.

Schedule of Activities: See BMP 3.1.1.

Section 8.6 Structural Maintenance -Operations

BMP 8.6.1 Stormwater System Maintenance

General Description: The Department of Public Works Stormwater Maintenance Division routinely

cleans pipes, cleans ditches, cleans and services drainage structures, repairs

pipes at cave-ins, and rehabilitates storm pipes.

BMP Goals and Objectives:

The objective of this BMP is to ensure that stormwater system operates as effectively as possible by keeping the system clean, clear, and in a well-

maintained condition.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges

from municipal separate storm sewers."

Roles and

Responsibilities:

The Department of Public Works Stormwater Maintenance Division is

responsible for stormwater system maintenance.

Contact Information: Questions related to stormwater system maintenance operations should be

directed to:

Stormwater Administrator Department of Public Works

(757) 382-3321

Policies and Procedures:

Department of Public Works Stormwater Maintenance Division performs maintenance on the stormwater system as needed. Typical work performed includes cleaning pipes, cleaning public ditches, repairing catch basins, and

repairing cave-ins.

SOPs: Not applicable.

Available Resources and References:

Not applicable.

Recordkeeping and

Reporting:

The Stormwater Maintenance Division documents the number of drainage structures cleaned, the miles of pipeline cleaned, and the miles of public ditches cleaned each year. These figures will be reported in the MS4 Annual Report.

Schedule of Activities: The Stormwater Maintenance Division will continue to perform maintenance

work as needed to the stormwater system throughout the permit period.

BMP 8.6.1, Stormwater System Maintenance

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City of Chesapeake Municipal Separate Storm Sewer System (MS4) Program Plan

Section 8.6 Structural Maintenance -Operations

BMP 8.6.2 Routine Oil-Water Separator Maintenance

General Description: The City of Chesapeake routinely performs maintenance on City-owned oil-

water separators.

BMP Goals and

Objectives:

The objective of this BMP is to ensure that stormwater system operates as effectively as possible by keeping the system clean, clear, and in a well-

maintained condition.

Reference Section of

VPDES Permit:

To be completed later.

Related Activities: Not applicable.

Authority: City Code Chapter 26, Article VIII: Stormwater Management

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(1), which requires "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

Roles and Responsibilities:

Each department or division is responsible for the maintenance of its oil-water

separator(s).

Contact Information:

Questions related to City-owned oil-water separators maintenance operations

should be directed to:

Waste Management Administrator Department of Public Works

(757) 382-3435

OR

Fleet Service Specialist/Safety Department of General Services

(757) 382-3382

Policies and Procedures:

Each department or division performs maintenance on City-owned oil-water separators as needed. Maintenance includes removal of trash and floatables

and pumping liquid out of the separators.

SOPs: Not applicable.

Available Resources

Not applicable.

and References:

Recordkeeping and Reporting:

Each department or division documents the maintenance performed on City-

owned oil-water separators each year.

BMP 8.6.2, Routine Oil-Water Separator Maintenance

Revision 0, May 2006

Page 8.6.2-1

Schedule of Activities:

Each responsible department or division will continue to perform maintenance work as needed to City-owned oil-water separators throughout the permit period. City Garage separators are cleaned out quarterly. Division of Waste Management separators are inspected periodically and cleaned out as needed.

Section 8.7 Structural Maintenance - CIP Program and Retrofits

BMP 8.7.1 Evaluate Flood Management Projects for Water Quality Impacts

General Description: The Department of Public Works evaluates each flood management project for

its potential impacts on water quality.

BMP Goals and

Objectives:

The purpose of this BMP is to ensure that water quality impacts are considered

in proposed flood management projects.

Reference Section of VPDES Permit:

To be completed later.

Related Activities: BMP 7.1.1: Chesapeake Bay Preservation Area Overlay District

BMP 7.2.1: Water Quality Requirements

Authority: City Code Chapter 26, Article X: Chesapeake Bay Preservation Area

Overlay District

• City Code Chapter 26, Article VIII: Stormwater Management

Virginia Stormwater Management Regulations

Applicable Federal Regulation:

This BMP addresses CFR Title 40, Part 122.26, Section (d)(2)(iv)(A)(4), which requires "A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible."

Roles and Responsibilities:

The Department of Public Works is responsible for the design and construction of storm water capital improvement flood control and water quality projects. During the development of flood control projects, Public Works evaluates each project with respect to water quality aspects.

The Department of Public Works plans to update its Master Drainage Plan to require consideration of water quality in flood management projects.

Contact Information:

Questions related to the consideration of water quality in flood management projects should be directed to:

City Engineer

Department of Public Works

(757) 382-8740

Policies and Procedures:

The City requires compliance with the Virginia Stormwater Management Handbook as the basis of design for stormwater management facilities. Public Works assesses the potential of each flood management project on water quality.

SOPs: Not applicable.

BMP 8.7.1, Evaluate Flood Management Projects for Water Quality Impacts Revision 0, May 2006 Page 8.7.1-1 **Available Resources** and **References**:

Virginia Stormwater Management Handbook (DCR)

Recordkeeping and Reporting:

The Department of Public Works documents projects evaluated for their impact on water quality. A summary of these projects will be provided in the MS4 Annual Report.

Activity	Schedule
Update Master Drainage Plan to require consideration	Year 5
of water quality in flood management projects.	

9.0 Monitoring

9.1 Historical Monitoring

During the first MS4 permit term the City was required to monitor chemical constituents from five selected outfalls and to calculate event mean concentrations (EMCs) of pollutants discharged from their stormwater outfalls based on the monitoring data collected. When compared to EMCs from other urban areas studied during the Nationwide Urban Runoff Program, these calculations indicated that the level of pollutants carried by stormwater in the City is at least typical of other urban areas and, in many cases, better.

While the chemical monitoring program was useful in determining that the stormwater runoff in the City is comparable to other urban areas, it was not found to be useful in determining the effectiveness of the City's stormwater management program. The high variability of the data, due to natural factors such as rainfall, makes it very difficult to detect increases or decreases in pollutant levels carried by stormwater runoff. Therefore, the six Hampton Roads Phase I communities, proposed modifying the MS4 permit to replace the chemical monitoring requirement with a Stormwater Management Program Effectiveness Indicator Tracking Program for the second permit term. The Virginia Department of Environmental Quality, who administered the MS4 permit program at that time, accepted the proposed tracking program in lieu of chemical monitoring and modified the six MS4 permits accordingly when they were reissued in spring 2001.

Since 2001, the Hampton Roads Planning District Commission (HRPDC) staff has prepared the individual Effectiveness Indicators' reports for the six Phase I localities, as well as a comprehensive regional summary of those reports, on an annual basis.

9.2 Current Monitoring

The City currently performs no wet weather monitoring on a routine recurring basis other than the dry weather field screening program described elsewhere in this MS4 plan. The City will develop a suitable monitoring program in accordance with the terms of the revised permit during Year 1 of the upcoming permit period. Details regarding the monitoring program, when developed, will be included in this section of the MS4 Program Plan.



Appendix B: Applicable Ordinances

Appendix C: Exhibits

Appendix D: MOAs and MOUs

Appendix E: Key Personnel Contact List

Appendix F: Annual Work Plan